

PROPOSED DESIGN DRAWINGS

CITY OF GAITHERSBURG - MINIATURE GOLF PARK OFFICE
BUILDING RENOVATION

514 S FREDERICK AVE, GAITHERSBURG, MARYLAND 20877

PERMIT / BID SUBMISSION JUNE 30, 2016



Gaithersburg
A CHARACTER COUNTS! CITY

MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016
3	REVISION # 3	07/19/2016

Revisions

Drawing Title

COVER SHEET

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model CADD Plot Scale 1:1

Drawn By ASM	Sheet Number A001
Checked By AV	



Gaithersburg
A CHARACTER COUNTS! CITY

NIKA



SHEET LIST

SHEET LIST	
Sheet Number	Sheet Name
A001	COVER SHEET
A002	GENERAL NOTES, ABBREVIATIONS & SYMBOLS
AS001	SITE PLAN - EXISTING & DEMOLITION
AS002	SITE PLAN - PROPOSED
D101	GROUND FLOOR - DEMOLITION
A102	GROUND FLOOR - PROPOSED
A103	REFLECTED CEILING PLAN
A104	ROOF PLAN
A200	WEST ELEVATION
A201	EAST ELEVATION
A202	SOUTH ELEVATION
A203	NORTH ELEVATION
A300	LONG BUILDING SECTION
A301	SHORT SECTION THROUGH LOBBY
A500	INTERIOR ELEVATIONS
A501	ROOF DETAILS
A600	WALL SCHEDULE
A601	FINISH SCHEDULE
A602	DOOR SCHEDULE & DETAILS
A603	WINDOW SCHEDULE & DETAILS
A604	BATHROOM FIXTURE SCHEDULE
M001	COVER SHEET - MECHANICAL
M101	MECHANICAL FLOOR PLANS
M501	MECHANICAL SCHEDULES AND DETAILS
E001	ELECTRICAL SYMBOLS AND ABBREVIATIONS
ES101	ELECTRICAL SITE PLAN
EDL101	ELECTRICAL LIGHTING PLAN - DEMOLITION
EDP101	ELECTRICAL POWER PLAN - DEMOLITION
EDP501	ELECTRICAL - POWER RISER DIAGRAM - EXISTING
EP101	ELECTRICAL POWER PLAN
EP501	ELECTRICAL CONDUIT RISER DIAGRAM (IT AND POWER ONLY)
EP601	ELECTRICAL PANEL SCHEDULES
EL101	ELECTRICAL LIGHTING PLAN
EL501	ELECTRICAL LUMINAIRES SCHEDULE
EL601	LIGHTING CALCULATIONS - INTERIOR
EL602	LIGHTING CALCULATIONS - SITE
EY501	SECURITY RISER DIAGRAM
E501	ELECTRICAL DETAILS
P001	GENERAL NOTES, PLUMBING ABBREVIATIONS & SYMBOLS
P100	PLUMBING FLOOR PLAN-DEMOLITION
P101	PLUMBING FLOOR PLAN
P200	SANITARY RISER DIAGRAM
P201	DOMESTIC WATER RISER DIAGRAM
P300	PLUMBING - DETAILS
P400	PLUMBING SCHEDULES
S100	STRUCTURAL - FLOOR PLAN
S101	STRUCTURAL ROOF PLAN
S300	STRUCTURAL - SECTION DETAILS

LOCATION MAP



ABBREVIATIONS:

& /	AND
@	ANGLE
C	AT
D	CENTER LINE
P	DIAMETER
#	PLATE
	POUND/NUMBER
A	ABV
	A/C
	AC
	ACOUST
	ADJ
	ADJ
	AFF
	AHU
	ALT
	ALUM
	ANC
	ANOD
	APPROX
	ARCH
	ASPH
	ASTM
	ATTCH
	AUTO
	AUX
B	BASE
BB	BASE BID
BC	BRICK COURSE
BD	BOARD
BF	BROOM FINISH
BL	BUILDING LINE
BLDG	BUILDING
BLKG	BLOCKING
BLKHD	BULKHEAD
BM	BEAM/BENCHMARK
BO	BY OTHERS/BOTTOM OF
BOT	BOTTOM
BP	BEARING PLATE
BS	BOTH SIDES
BSMT	BASEMENT
BTWN	BETWEEN
BUR	BUILT-UP ROOF
C	CONDUIT
CAB	CABINET
CAP	CAPACITY
CAT	CATALOG
CB	CIRCUIT BREAKER/CATCH BASIN
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT/CEMENTITIOUS
CF	CUBIC FEET
CFCI	CONTRACTOR-FURNISHED, CONTRACTOR-INSTALLED
CH	CEILING HEIGHT
CI	CAST IRON
CIR	CIRCLE
CIRC	CIRCUMFERENCE
CJ	CONTROL JOINT
CLKG	CAULKING
CLG	CEILING
CLR	CLEAR
CM	CENTIMETER
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT/CASED OPENING
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CP	CHROME PLATED
CS	COUNTERSINK
CSMT	CASEMENT
CT	CERAMIC TILE
CTR	CENTER
CWG	CLEAR WIRE GLASS
CY	CUBIC YARDS
D	DEPTH
DB	DECIBELS
DBL	DOUBLE
DEMO	DEMOLISH/DEMOLITION
DET	DETAIL
DF	DRINKING FOUNTAIN
DG	DAY GATE
DH	DOUBLE HUNG
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DP	DAMP/PROOFING
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
DWR	DRAWER
E	(E)
EA	EXISTING
EF	EAST
EG	EACH
EGC	EACH FACE
EJ	FOR EXAMPLE
ELEV	EPOXY GLAZED COATING
ENCL	EXPANSION JOINT
ENTR	ELECTRICAL
EQ	ELEVATOR/ELEVATION
EQUIP	ENCLOSURE
EIFS	ENTRANCE
	EQUAL
	EQUIPMENT
	EXTERIOR INSULATION
	& FINISH SYSTEM
ESC	ESCALATOR
EST	ESTIMATED
EW	EACH WAY
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION/EXPANDED
EXT	EXTERIOR
F	FLAME/FLUSH
FA	FIRE ALARM
FBG	FOIL-BACKED GYPSUM BOARD
FDN	FOUNDATION
FE/BR	FORCED-ENTRY/BALLISTIC-RESISTANT
FEW	FIRE EXTINGUISHER WALL MOUNTED
FIG	FIGURE
FIN	FINISH
FIXT	FIXTURE
FL	FLASH FLOOR
FLEX	FLEXIBLE
FLUOR	FLUORESCENT
FM	FACTORY MUTUAL RESEARCH CORP.
FO	FACE OF
FRT	FIRE RETARDANT TREATED
FT	FOOT/FEET
FTG	FOOTING
FURN	FURNITURE/FURNISHED
FURR	FURRING

G	G	GUTTER
	GA	GAUGE
	GAL	GALLON
	GALV	GALVANIZED
	GB	GRAB BAR/GYPSUM BOARD
	GC	GENERAL CONTRACTOR
	GFCI	GOVERNMENT-FURNISHED, GOVERNMENT-INSTALLED, GOVERNMENT-FURNISHED
	GFGI	
	GFE	
	GL	EQUIPMENT
	GL	GLASS/GLAZED
	GOVT	GOVERNMENT
	GND	GROUND
	GR	GRADING/GRADE
	GWB	GYPSUM WALLBOARD
	GYP BD	GYPSUM BOARD
H	HC	HOLLOW CORE
	HD	HEAD/HEAVY DUTY
	HDWR	HARDWARE
	HH	HAND HOLE
	HM	HOLLOW METAL
	HC	HORIZONTAL
	HP	HORSEPOWER
	HR	HOUR
	HTG	HEATING/HEAT
	HTH	HEIGHT/HIGH
	HVAC	HEATING, VENTILATING & AIR CONDITIONING
	HZ	HERTZ
I	ID	INSIDE DIAMETER/ INTERIOR DIMENSION
	IG	INSULATED GLASS
	IC	IMPACT INSULATION CLAS
	IN	INCH
	INCL	INCLUDING
	INFO	INFORMATION
	INSUL	INSULATION
	INT	INTERIOR
J	JAN	JANITOR
	JST	JOIST
	JT	JOINT
K	KD	KNOCK-DOWN/KILN-DRIED
	KIT	KITCHEN
	KO	CLOSED CIRCUIT
	KPA	KILOPASCAL
	KW	KILOWATT
L	L	LONG
	L/S	LITERS PER SECONI
	LAM	LAMINATE(D)
	LB	POUND/LOAD-BEARIN
	LBL	LABEL
	LF	LINEAR FEE
	LG	LONG/LENGTH
	LH	LEFT HAND
	LL	LIVE LOAD
	LP	LOW POINT
	LT	LIGHT
	LTG	LIGHT/LIGHTING
M	M	METER
	MAS	MASONRY
	MAT/MATL	MATERIAL
	MAX	MAXIMUM
	MECH	MECHANICAL
	MED	MEDIUM
	MEMB	MEMBRANE
	MET/MTL	METAL
	MFR	MANUFACTURE
	MH	MOUNTING HEIGH
	MIN	MINIMUM
	MIR	MIRROR
	MISC	MISCELLANEOU
	MIX	MIXTURE
	ML	MATCH LINE
	MLD	MOLDING
	MM	MILLIMETER
	MS	MASONRY OPENING
	MT	MOTOR STARTER
	MTD	MARBLE THRESHOL
	MTG	MOUNTED
	MULL	MOUNTIN
		MULLION
N	N	NORTH
	N/A	NOT APPLICABLE
	NIC	NOT IN CONTRAC
	NLB	NON-LOAD BEARING
	NO	NUMBER
	NOM	NOMINAL
	NTS	NOT TO SCALE
O	OC	ON CENTER
	OD	OUTSIDE DIAMETE
	OFF	OFFICE
	OH	OVERHEAD
	OPHD	OPPOSITE HANE
	OPNG	OPENING
	OPP	OPPOSITE HANE
	OZ	OUNCE(S)
P	PA	PASCAL
	PC	PORTLAND CEMENT
	PCF	POUNDS PER CUBIC FO
	PF	POLISH FINIS
	PFB	PREFABRICATE
	PLAM	PLASTIC LAMINAT
	PLAS	PLASTER
	PLF	POUNDS PER LINEAR FOC
	PNL	PANEL
	PNT	PAINT
	POLY	POLYETHYLENE
	PR	PAIR
	PRESS TR	PRESSURE TREATE
	PRF	PREFINISHE
	PSF	POUNDS PER SQUARE FOO
	PT	POINT
	PRCST	PRECAST
	PVC	POLY/VINYL CHLORIDE
	PWD	PLYWOOD
	PTN	PARTITION
	P.T.	PRESSURE TREATED WOOD
Q	QT	QUARRY TILE
	QTB	QUARRY TILE BASE
	QUAL	QUALITY

R	RA	RETURN AIR
	RAF	RELILIENT ATHLETIC FLOORIN
	RAD/r	RADIUS
	RCP	REFLECTED CEILING GAL
	REBAR	REINFORCING BAI
	REC	RECEPTACLE
	REF	REFERENCE
	REGIS	REGISTRATIO
	REINF	REINFORCING/REINFORCI
	REM	REMOVE
	REPL	REPLACE
	REOD	REQUIRE
	RESIL	RESILIENT
	RET	RETURN AIR
	REV	REVISE/REVISIC
	RF	ROUGH FINIS
	RGS	RIGID GALVANIZED STEEL
	RH	RIGHT HANE
	RM	ROOM
	RO	ROUGH OPENIN
	RWL	RAIN WATER LEADE
	RWD	REDWOOD
S	S	SOUTH
	SA	SUPPLY AIR
	SAC	SUSPENDED ACOUSTICAL CEILI
	SC	SOLID CORE
	SCH	SCHEDULE
	SDG	SIDING
	SDT	STATIC DISSIPATIVE TIL
	SECT	SECTION
	SF	SEAMLESS FLOORING
	SG(#)	DUCT SECURITY GRILL, (TYPE
	SH	SHEATHING
	SHTH	SIMILAR
	SJ	STEEL JOIS
	SM	SURFACE MOUNTED
	SPEC	SPECIFICAT
	SQ	SQUARE
	SQ YD	SQUARE YARD
	SQ FT	SQUARE FOO
	SS	STAINLESS STEEL
	STA	STATION
	STD	STANDARD
	ST STL	STAINLESS STEEL
	STL	STEEL
	SUSP	SUSPENDED
	SV	SHEET VINYL
	SW	SWITCH
	SYM	SYMMETRICAL
	SYS	SYSTEM
	SH, SH	SHEE
	STOR	STORAGE
	STRUCT	STRUCTURE
T	T	TREAD/THICK
	TB	TOWEL BAR
	TC	TOP OF CURB
	TELE	TELEPHONE/TELECO
	TEMP	TEMPORAR
	TER	TERRAZZO
	TF	TROWEL FINISH
	T&G	TONGUE & GROOVE
	THK	THICK/THICKNESS
	THR	THRESHOLD
	THRU	THROUGH
	TO	TOP OF
	TOS	TOP OF CONCRET
	TOW	TOP OF STEEL
	TW	TOP OF WALL
	TYP	TYPICAL
U	UC	UNDERCUT
	UL	UNDERWRITER'S LABORATORIE
	UNF	UNFINISHE
	UNO	UNLESS NOTED OTHERWISE
	URM	UNREINFORCED MASONR
V	V	VENT/VOLT/VALVE
	(V)	VERIFY
	VAV	VARIABLE AIR VOLUM
	VB	VAPOR BARRIER
	VCB	VINYL COVE BASE
	VCT	VINYL COMPOSITION TIL
	VD	VOLUME DAMPER/VAULT DOC
	VENTD	VENTED
	VERT	VERTICAL
	VEST	VESTIBULE
	VJ	V-JOINT
	VOL	VOLUME
	VT	VINYL TILE
	VWC	VINYL WALL COVERING
W	WD	WOOD
X	XFMR	TRANSFORMER

MATERIAL SYMBOLS

EARTH		FIBER BOARD OR RIGID INSULATION	
GRAVEL OR POROUS FILL		PLASTER, GYPSUM WALL BOARD, MORTAR, OR PARTICLE BOARD	
CONCRETE MASONRY UNIT		FINISHED WOOD	
BRICK		ROUGH WOOD	
STONE		PLYWOOD	
CONCRETE		STEEL OR IRON	
FIBROUS INSULATION		ALUMINUM	

REFERENCE SYMBOLS

WALL SECTION		DETAIL/ SECTION NUMBER
		SIMILAR INDICATION
		SHEET NUMBER
BUILDING SECTION		DETAIL/ SECTION NUMBER
		SIMILAR INDICATION
		SHEET NUMBER
DETAIL SECTION		DETAIL/ SECTION NUMBER
		SIMILAR INDICATION
		SHEET NUMBER
EXTERIOR ELEVATION		ELEVATION NUMBER
		SHEET NUMBER
INTERIOR ELEVATION		ELEVATION NUMBER
		SHEET NUMBER

ARCHITECTURE / INTERIORS SYMBOLS

PARTITION TYPE		PARTITION NUMBER
DOOR SYMBOL		DOOR OR BORROWED LIGHT NUMBER
EXTERIOR WINDOW SYMBOL		WINDOW NUMBER
ROOM NAME AND NUMBER		ROOM NAME ROOM NUMBER

GENERAL NOTES:

- CONTRACTOR SHALL AT ALL TIMES RETAIN AN APPROVED SET OF PERMIT DRAWINGS ON THE CONSTRUCTION PREMISE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ADDITIONAL TRADE PERMITS FOR ELECTRICAL, MECHANICAL ETC. WORK AS REQUIRED.
- CONTRACTOR SHALL COMPLY WITH THE BUILDING RULES AND REGULATIONS FOR WORKING HOURS, DELIVERY AND HANDLING OF MATERIAL, AND CONSTRUCTION WASTE REMOVAL.
- IN ORDER TO FACILITATE MINIMUM DISRUPTION TO ROUTINE OPERATIONS OF THE STATION, THE CONTRACTOR SHALL BE REQUIRED TO SCHEDULE PORTIONS OF THE CONSTRUCTION DURING WEEKENDS, AND AFTER HOURS.
- DO NOT SHORE OR HANDLE ANY CONSTRUCTION MATERIAL IN THE PATH TO EGRESS UNDER ANY CIRCUMSTANCES.
- DURING CONSTRUCTION, PORTIONS OF THE BUILDING OUTSIDE OF THE SCOPE OF WORK SHALL REMAIN OCCUPIED AND OPERATIONAL. OCCUPIED PORTIONS OF THE STRUCTURE WILL BE SEPARATED FROM PORTIONS OF THE STRUCTURE UNDERGOING ALTERATION, CONSTRUCTION, OR DEMOLITION OPERATIONS BY TEMPORARY WALLS WITH A MINIMUM 1-HR FIRE RESISTANCE RATING IN ACCORDANCE WITH NFPA 241 §8.6.2. OPENING PROTECTIVES WILL HAVE AT LEAST A 45 MINUTE FIRE PROTECTION RATING.
- EXTREME CARE SHALL BE EXERCISED IN CUTTING, DRILLING OR ANCHORING TO THE EXISTING STRUCTURE. IF ANY DETERIORATION OR DAMAGE TO THE EXISTING STRUCTURE OCCURS DURING CONSTRUCTION, IT SHALL BE IMMEDIATELY REPORTED TO THE CITY AND ARCHITECT-ENGINEER OF RECORD.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL CONSTRUCTION INSPECTION WITH APPROPRIATE CODE OFFICER DURING CONSTRUCTION AS REQUIRED.
- CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING, SUPPORT AND PROTECTION OF EXISTING CONDITIONS TO REMAIN DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SAFE WORK ENVIRONMENT AND COMPLIANCE WITH OSHA SAFETY STANDARD DURING CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH THE CITY FOR TEMPORARY SHUT DOWN OF ANY BUILDING SYSTEM DURING CONSTRUCTION.
- REMOVE ANY NAILS, SCREWS, SURFACE MOUNTED RACEWAY, HARDWARE, NON-FUNCTIONING ELECTRICAL DEVICES AND OTHER EXPOSED ITEMS ON EXISTING WALLS/PORIONS IN THE AREA OF NEW WORK.
- PATCH AND REPAIR RESULTING WALL/PARTITION DAMAGE AS REQUIRED PREPARING SURFACES TO RECEIVE NEW FINISHES AS SCHEDULED.
- CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISE CLEAN AND FREE OF ACCUMULATIONS OF WASTE MATERIAL AND RUBBISH CAUSED BY THE CONSTRUCTION.
- MANUFACTURER NAMES AND PRODUCTS ARE INDICATED ON DRAWINGS TO INDICATE MINIMUM PERFORMANCE CRITERIA. EQUALS OR COMPARABLE MAY BE SUBMITTED FOR REVIEW DURING THE SUBMITTAL PROCESS.
- CONTRACTOR SHALL FULLY COMPLY WITH ALL REQUIREMENTS OF "GENERAL CONDITIONS" FURNISHED BY THE CITY.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION PHASING WITH THE CITY. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
- ALL DIMENSIONS FOR NEW WALLS ARE FROM FACE OF STUD FRAMING UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS FOR NEW INTERIOR DOORS ARE TO THE CENTER OF DOORS, UNLESS OTHERWISE NOTED.
- ALL EXISTING CONDITIONS, UTILITY SURVEY, ELEVATIONS & DIMENSIONS TO BE FIELD VERIFIED BY GENERAL CONTRACTOR.
- CONTRACTOR SHALL PROVIDE A SITE UTILIZATION PLAN AND SUBMIT IT TO THE CITY OF GAITHERSBURG DEPARTMENT OF PUBLIC WORKS FOR APPROVAL.
- CONTRACTOR SHALL OBTAIN WSSC PERMIT PRIOR TO COMMENCEMENT OF ANY PLUMBING INSTALLATION.
- CONTRACTOR SHALL SURVEY AND VERIFY AND CONFIRM ALL WET AND DRY UNDERGROUND UTILITY AND CONFIRM ELEVATIONS

APPLICABLE CODES, STANDARD AND AUTHORITY

ALL WORK RELATED TO THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES, AND CRITERIA AS APPLICABLE.

- 2012 International Building Code (IBC)
- 2012 International Mechanical Code (IMC)
- 2012 International Fuel Gas Code (IFGC)
- 2012 International Energy Conservation Code (IECC)
- 2012 Life Safety Code – NFPA 101(LSC)
- 2011 National Electric Code – NFPA 70 (NEC)
- Maryland Accessibility Code – ADAAG/2010
- Fire Safety Codes - The Fire Safety Code of Montgomery County, Maryland, as it existed on August 1, 1996, being Chapter 22 of the Montgomery County Code, 1984 (1994 Replacement Volume), the 2012 Editions of the National Fire Protection Association Uniform Fire Code (NFPA 1) and Life Safety Code® (NFPA 101®), all associated NFPA codes or standards incorporated by reference, and the latest editions of certain other NFPA codes not incorporated by reference into NFPA 1 or NFPA 101®

APPROVING AUTHORITY:
City of Gaithersburg
Planning and Code Administration
Permits and Inspections
31 S. Summit Ave.
Gaithersburg, MD 20877
301-258-6330
301-258-6336 (fax)

- Plumbing and natural gas
Plumbing and natural are under the authority of the Washington Suburban Sanitary Commission (WSSC), which currently uses the 2012 International Plumbing Code (IPC) and the 2012 International Fuel Gas Code (IFGC)
- Health review, when required, is performed by the Montgomery County Department of Health and Human Services, Regulatory Division - 240-777-398



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877



NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.

I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

GENERAL NOTES,
ABBREVIATIONS & SYMBOLS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number
12-0009.012

Date
06.30.2016

Drawing Scale: AS NOTED

CADD Filename
Revit Model

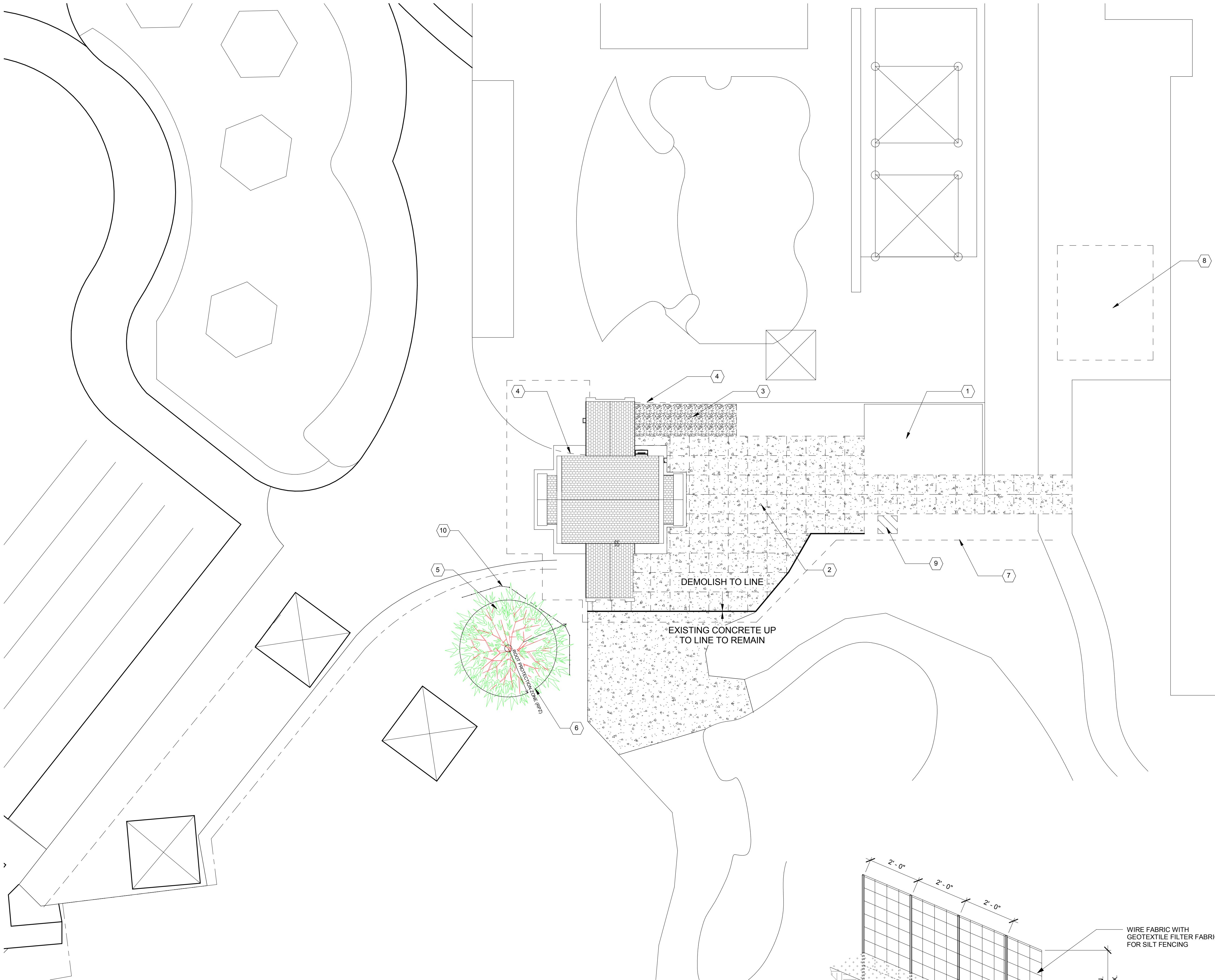
CADD Plot Scale
1:1

Drawn By
ASM

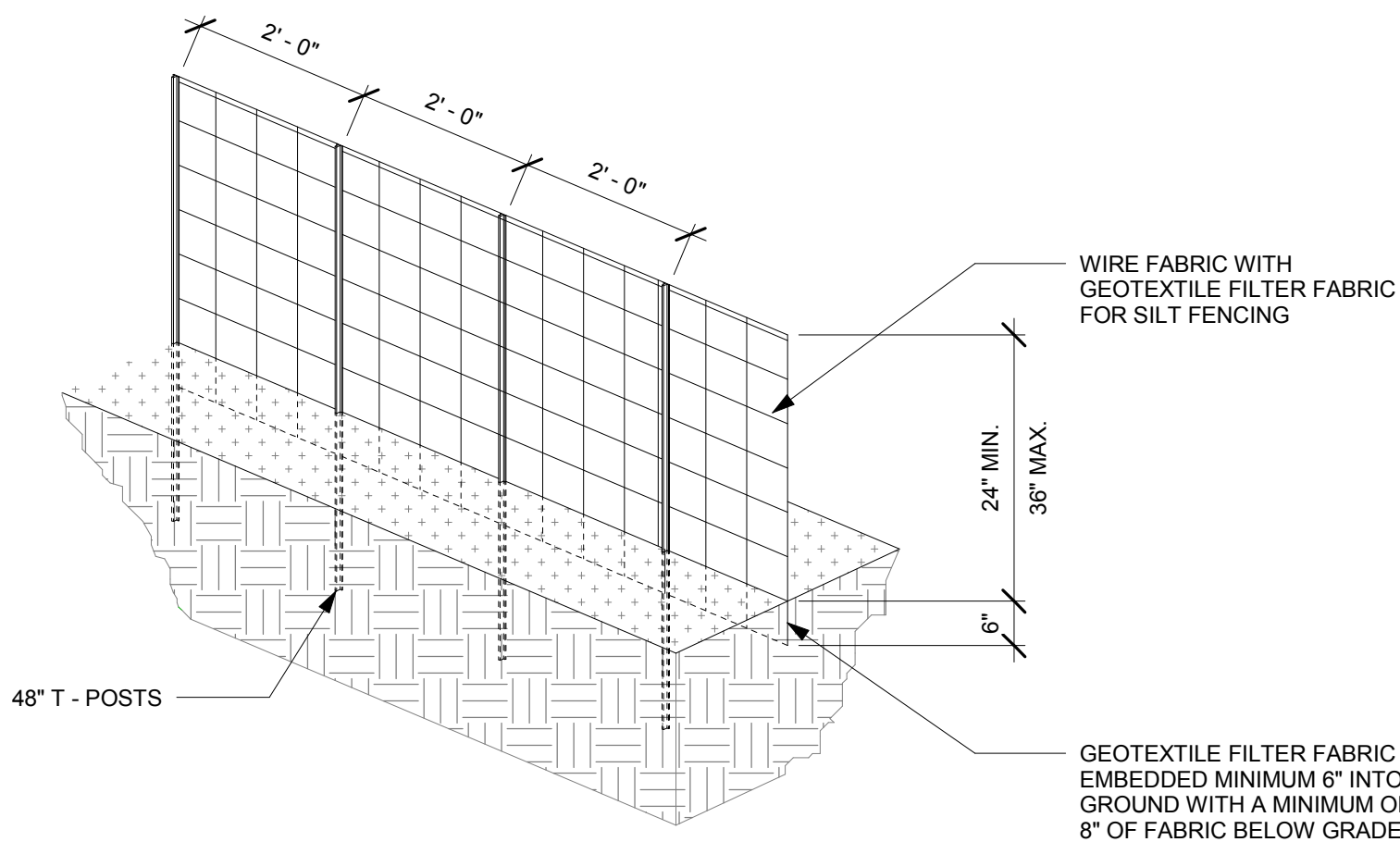
Checked By
AV

Sheet Number

A002



1 SITE PLAN - EXISTING & DEMOLITION
AS001 3/32" = 1'-0"



2 SILT FENCE/TREE PROTECTION FENCING DETAIL
AS001 1/2" = 1'-0"

GENERAL SITE PLAN NOTES

- 1.) AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE WORKING ENVIRONMENT PER OSHA STANDARDS. ROOF INSTALLERS SHALL BE CERTIFIED AND EXPERIENCED. THE CREW MEMBERS AND SUPERVISORS SHALL WEAR ALL REQUIRED PERSONAL PROTECTION EQUIPMENT, SAFE SAFETY HARNESS AND USE SECURED SHORING.
- 2.) THE SUBSTRATE MUST BE SECURELY FASTENED TO STRUCTURE. IF IT IS FOUND UNSTABLE, IMMEDIATELY NOTIFY THE ARCHITECT AND THE OWNER.
- 3.) THE SUBSTRATE MUST BE CLEAN, DRY, STRUCTURALLY SOUND, FREE OF LOOSE MATERIAL, VOIDS, PROJECTIONS, HOT SPOTS, RELEASE AGENTS, COATINGS, OR OTHER MATERIALS THAT MAY AFFECT ADHESION.
- 4.) THERE SHALL BE NO PLANAR IRREGULARITIES GREATER THAN 6.4 MM (1/4 IN) WITHIN ANY 1.2 (4 FT) RADIUS.
- 5.) PRODUCTS AND INSTALLATION SHALL BE SUBJECTED TO A WRITTEN WARRANTY FROM THE CONTRACTOR FOR A PERIOD OF 20 YEARS MINIMUM, WITH PROVISION TO RENDER ALL SERVICES NECESSARY TO MITIGATE ANY AND ALL DAMAGE TO THE PROPERTY IF OCCURS DURING THE WARRANTED PERIOD DUE TO FAILURE OF ROOFING, AT NO COST TO THE GOVERNMENT (OWNER).

SITE DEMOLITION WORK NOTES

1. EXISTING CONCRETE SLAB IN PICNIC TABLE AREA TO REMAIN.
2. EXISTING CONCRETE SLAB TO BE DEMOLISHED AND REPLACED.
3. EXISTING ASPHALT PAVING AREA TO BE DEMOLISHED AND REPLACED WITH CONCRETE.
4. EXISTING FENCING TO BE DEMOLISHED TO ACCOMMODATE NEW CONSTRUCTION.
5. PROTECT EXISTING TREE.
6. MAINTAIN PROTECTION ZONE CLEAR OF CONSTRUCTION ACTIVITY.
7. CONSTRUCTION FENCING. COORDINATE WITH CITY'S APPOINTED PROTECTION MANAGER.
8. PROPOSED LAYDOWN AREA. COORDINATE WITH CITY'S APPOINTED PROTECTION MANAGER.
9. EXCAVATE EARTH TO CREATE LOCATION OF NEW LIGHTING/AMPLIFIER POLE.
10. INSTALL NEW SILT / TREE PROTECTION FENCING TO ESTABLISH A PROTECTIVE ZONE AROUND EXISTING TREE



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

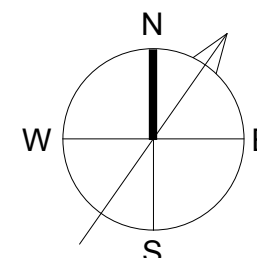
Drawing Title

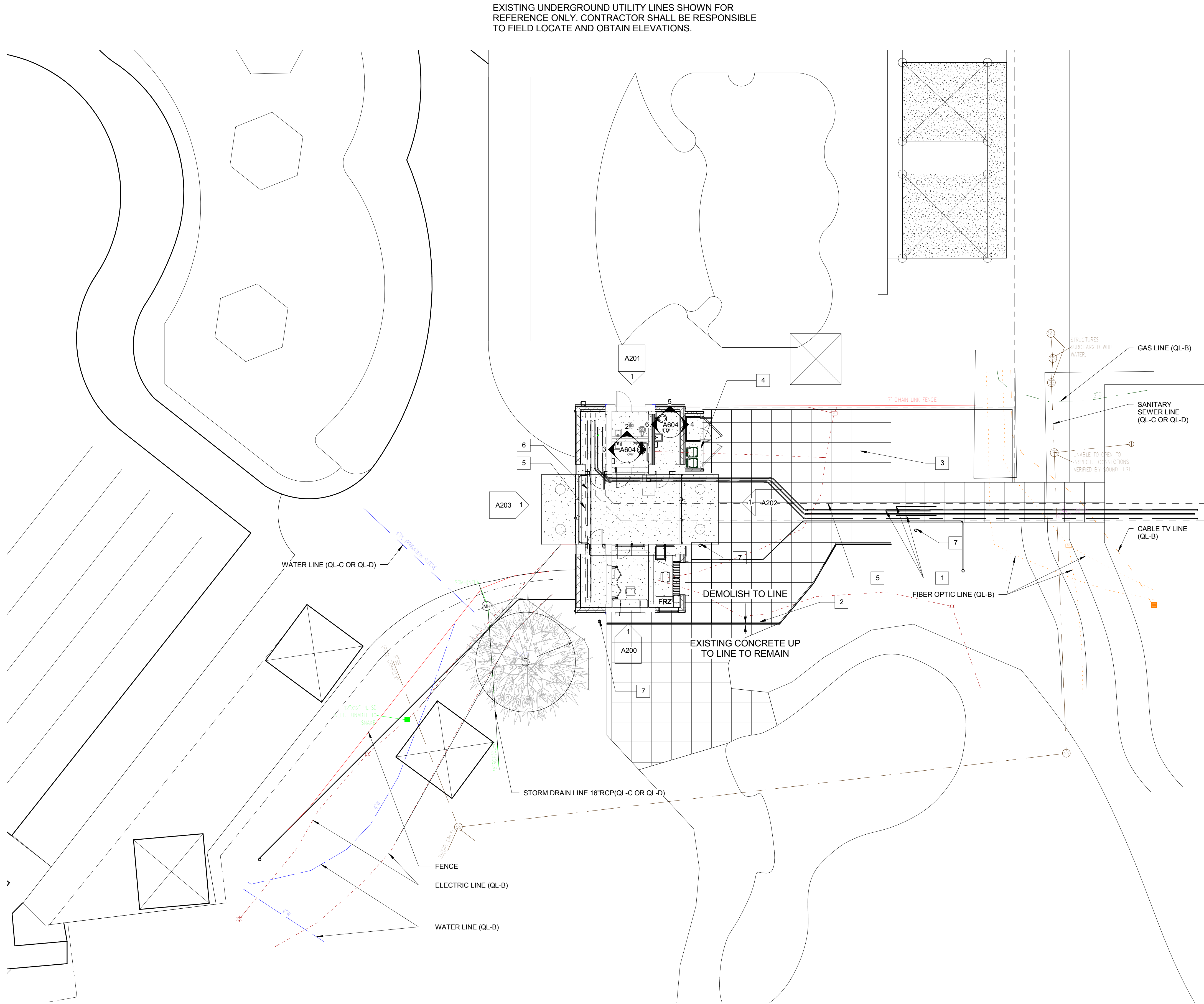
**SITE PLAN - EXISTING &
DEMOLITION**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By ASM	Sheet Number AS001
Checked By AV	





1 SITE PLAN - PROPOSED
AS002 3/32" = 1'-0"

GENERAL SITE PLAN NOTES

- 1.) AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE WORKING ENVIRONMENT PER OSHA STANDARDS. ROOF INSTALLERS SHALL BE CERTIFIED AND EXPERIENCED. THE CREW MEMBERS AND SUPERVISORS SHALL WEAR ALL REQUIRED PERSONAL PROTECTION EQUIPMENT, SAFE SAFETY HARNESS AND USE SECURED SHORING.
- 2.) THE SUBSTRATE MUST BE SECURELY FASTENED TO STRUCTURE. IF IT IS FOUND UNSTABLE, IMMEDIATELY NOTIFY THE ARCHITECT AND THE OWNER.
- 3.) THE SUBSTRATE MUST BE CLEAN, DRY, STRUCTURALLY SOUND, FREE OF LOOSE MATERIAL, VOIDS, PROJECTIONS, HOT SPOTS, RELEASE AGENTS, COATINGS, OR OTHER MATERIALS THAT MAY AFFECT ADHESION.
- 4.) THERE SHALL BE NO PLANAR IRREGULARITIES GREATER THAN 6.4 MM (1/4 IN) WITHIN ANY 1.2 (4 FT) RADIUS.
- 5.) PRODUCTS AND INSTALLATION SHALL BE SUBJECT TO A WRITTEN WARRANTY FROM THE CONTRACTOR FOR A PERIOD OF 20 YEARS MINIMUM, WITH PROVISION TO RENDER ALL SERVICES NECESSARY TO MITIGATE ANY AND ALL DAMAGE TO THE PROPERTY IF OCCURS DURING THE WARRANTED PERIOD DUE TO FAILURE OF ROOFING, AT NO COST TO THE GOVERNMENT (OWNER).

SITE NEW WORK NOTES

1. EXCAVATE TRENCH AND INSTALL ELECTRICAL CONDUIT UNDER NEW SLAB TO EXISTING COMMUNITY CENTER. REFER TO SHEET ES101 FOR SIZE AND QUANTITY. CONTRACTOR SHALL FIELD DETERMINE ROUTING.
2. ALIGN NEW CONCRETE SLAB TO ELEVATION OF EXISTING SLAB ALONG EDGE OF EXISTING SLAB.
3. INSTALL NEW CONCRETE SLAB WITH PROFILE TO MATCH EXISTING 4' X 4' SQUARES.
4. INSTALL NEW CONCRETE SLAB FOR NEW TRASH ENCLOSURE AND STORAGE. SEE ARCH A601 FOR DETAILS ON TRASH ENCLOSURE FENCING.
5. EXCAVATE NEW TRENCHING FOR CONDUIT INSTALLATION. SEE ELECTRICAL E501 FOR DETAILS ON TRENCHING
6. INSTALL ELECTRICAL CONDUIT IN UNDERGROUND TRENCH BETWEEN NORTH AND SOUTH STORAGE ROOMS. SEE ELECTRICAL ES101 FOR DETAILS
7. INSTALL NEW 6" DIAMETER METAL POLE SEE E501 FOR METAL POLE BASE DETAIL



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15975, expiration date 10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

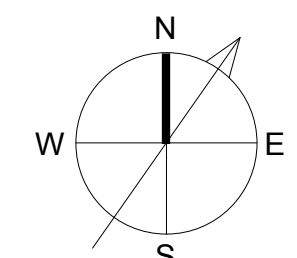
Drawing Title

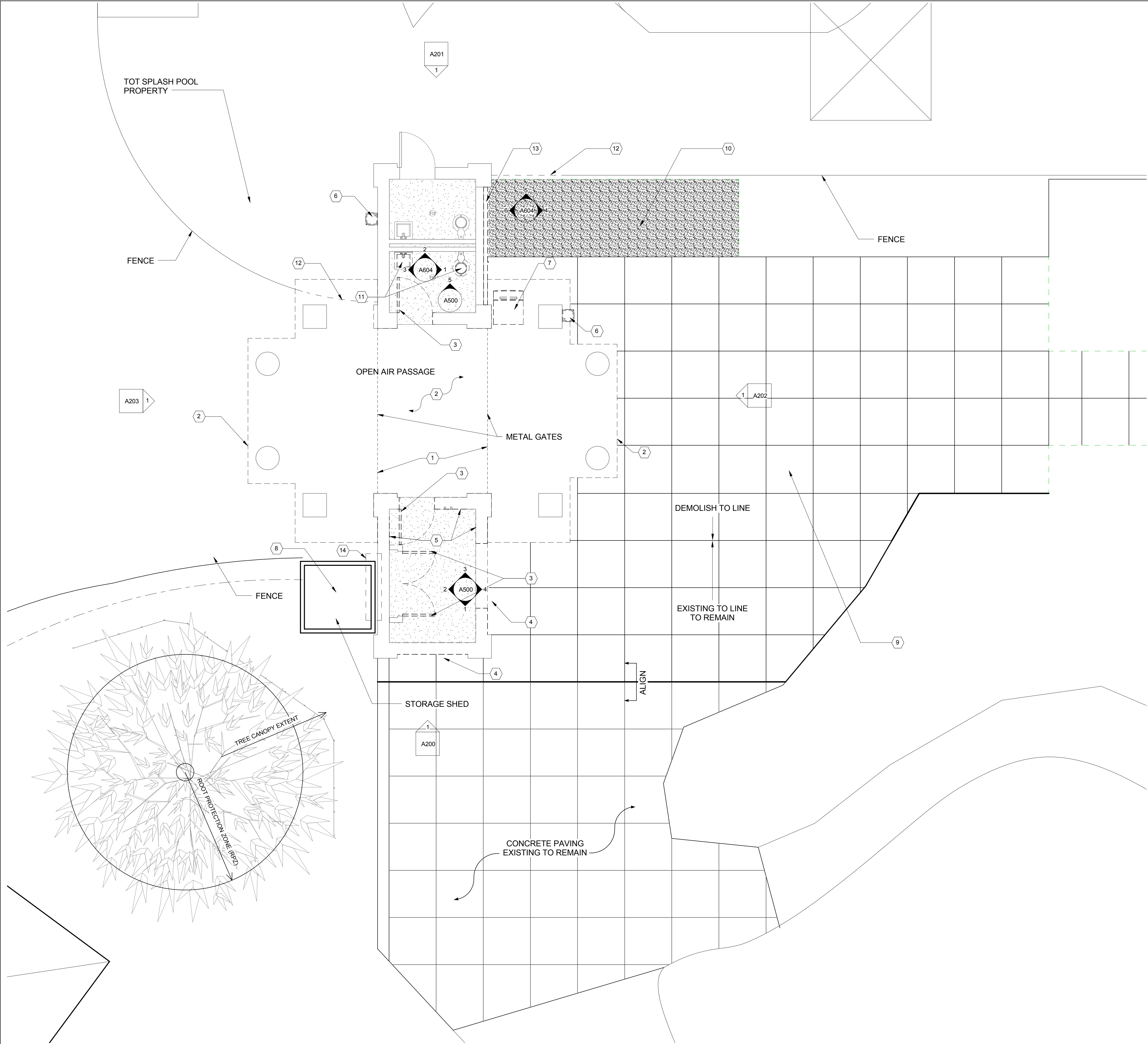
SITE PLAN - PROPOSED

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By ASM	Checked By AV
Sheet Number AS002	





DEMOLITION LEGEND

1. REMOVE EXISTING METAL GATES AND HARDWARE
2. REMOVE EXISTING STONE PAVING TO BOUNDARY
3. REMOVE EXISTING DOOR
4. REMOVE EXISTING SHUTTER
5. REMOVE EXISTING NON-BEARING INFILL TO BOTTOM OF BEAM \pm 7'-4".
6. REMOVE AND SALVAGE EXISTING WATER FOUNTAIN FOR RELOCATION. CAP EXISTING PLUMBING AT LOCATION.
7. REMOVE EXISTING ICE MACHINE
8. REMOVE EXISTING STORAGE SHED, ANY SUPPORTS OR ANCHORING, AND EXISTING ENTRY SLAB
9. REMOVE CONCRETE FOR INSTALLATION OF NEW CONDUIT AND CORRECTION OF SLOPE FOR ADA REQUIREMENTS
10. REMOVE EXISTING ASPHALT PAVING
11. REMOVE EXISTING PLUMBING FIXTURES
12. EXISTING FENCING TO BE DEMOLISHED TO NEAREST POST TO ACCOMODATE NEW CONSTRUCTION
13. REMOVE 4" FACE BRICK OFF EXISTING WALL TO ACCOMODATE NEW INTERIOR PLUMBING WALL.
14. PROTECT AND MAINTAIN ELECTRICAL STUBS.



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

**GROUND FLOOR -
DEMOLITION**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number
12-0009.012

Drawing Scale: AS NOTED

Date
06.30.2016

CADD Filename
Revit Model

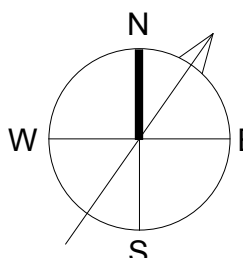
CADD Plot Scale
1:1

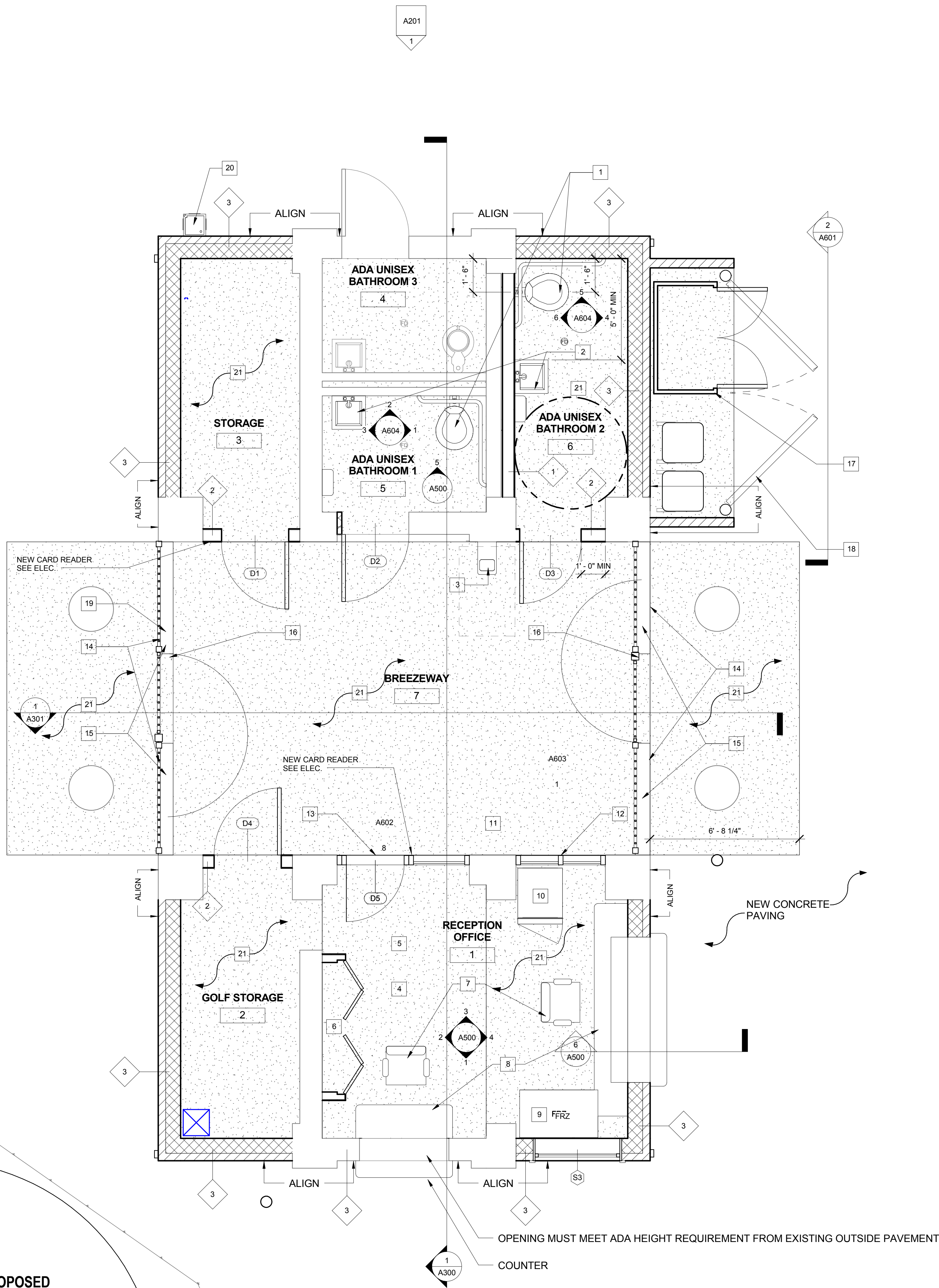
Drawn By
ASM

Checked By
AV

Sheet Number

D101





GENERAL NOTES

- 1.) AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE WORKING ENVIRONMENT PER OSHA STANDARDS. ROOF INSTALLERS SHALL BE CERTIFIED AND EXPERIENCED. THE CREW MEMBERS AND SUPERVISORS SHALL WEAR ALL REQUIRED PERSONAL PROTECTION EQUIPMENT, SAFE SAFETY HARNESS AND USE SECURED SHORING.
- 2.) THE SUBSTRATE MUST BE SECURELY FASTENED TO STRUCTURE. IF IT IS FOUND UNSTABLE, IMMEDIATELY NOTIFY THE ARCHITECT AND THE OWNER.
- 3.) THE SUBSTRATE MUST BE CLEAN, DRY, STRUCTURALLY SOUND, FREE OF LOOSE MATERIAL, VOIDS, PROJECTIONS, HOT SPOTS, RELEASE AGENTS, COATINGS, OR OTHER MATERIALS THAT MAY AFFECT ADHESION.
- 4.) THERE SHALL BE NO PLANAR IRREGULARITIES GREATER THAN 6.4 MM (1/4 IN) WITHIN ANY 1.2 M (4 FT) RADIUS.
- 5.) PRODUCTS AND INSTALLATION SHALL BE SUBJECTED TO A WRITTEN WARRANTY FROM THE CONTRACTOR FOR A PERIOD OF 20 YEARS MINIMUM, WITH PROVISION TO RENDER ALL SERVICES NECESSARY TO MITIGATE ANY AND ALL DAMAGE TO THE PROPERTY IF OCCURS DURING THE WARRANTED PERIOD DUE TO FAILURE OF ROOFING, AT NO COST TO THE GOVERNMENT (OWNER).

NEW WORK NOTES

1. PROVIDE & INSTALL NEW ADA WATER CLOSET. SEE P200 FOR SPECIFICATION.
2. PROVIDE & INSTALL NEW WALL MOUNTED ADA LAVATORY. SEE P200 FOR SPECIFICATION.
3. PROVIDE & INSTALL NEW ELECTRIC WATER COOLER 34" FROM FINISH FLOOR. SEE P200 FOR SPECIFICATION.
4. PROVIDE & INSTALL CONCRETE SEALER ON CONCRETE SLAB. SEE A601 FINISH SCHEDULE FOR SPECIFICATION.
5. PROVIDE & INSTALL NEW PLASTIC EGGCRATE PANEL CEILING SYSTEM. SEE REFLECTED CEILING PLAN ON A103 FOR CEILING HEIGHTS
6. PROVIDE & INSTALL NEW 2" X 4" PARTITION WALL WITH 1/2" GWB & NEW BIFOLD DOORS FOR ELECTRICAL CLOSET.
7. NEW OFFICE CHAIRS TO BE SELECTED BY OWNER.
8. PROVIDE & INSTALL NEW SHUTTER WINDOW WITH STAINLESS STEEL COUNTERTOP WITH BRUSHED FINISH. SEE A603 FOR DETAILS.
9. EXISTING FREEZER - NEW LOCATION
10. EXISTING FRIDGE - NEW LOCATION
11. EXISTING ICE MACHINE - NEW LOCATION
12. PROVIDE & INSTALL NEW STORE FRONT AS DETAILED ON A603 WITH DOOR
13. PROVIDE & INSTALL NEW STORE FRONT WITH NEW ENTRY TO REPLACE EXISTING BRICK WALL & EXISTING STEEL DOOR
14. PROVIDE & INSTALL NEW 2' BRICK KNEE WALL
15. PROVIDE & INSTALL NEW ALUMINUM FENCE ON TOP OF 2' BRICK KNEE WALL. SEE A602 FOR DETAILS
16. PROVIDE & INSTALL NEW ALUMINUM GATE WITH SWING CLEAR HINGES. SEE A602 FOR DETAILS
17. PROVIDE & INSTALL NEW PREFABRICATED METAL STORAGE UNIT. SEE PRODUCT DATA SHEETS
18. PROVIDE & INSTALL NEW ALUMINUM GATE WITH ALUMINUM PICKETS.
19. INSTALL NEW DOORBELL ON ALUMINUM PLATE BETWEEN PICKETS AT ADA HEIGHT, WITH SPEAKER IN MAIN OFFICE
20. REINSTALL SALVAGED ELECTRIC WATER COOLER 34" FROM FINISH FLOOR. SEE P200 FOR SPEC.
21. NEW CONCRETE SLAB. SEE STRUCTURAL SHEET S100



A CHARACTER COUNTS! CITY

MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.

I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

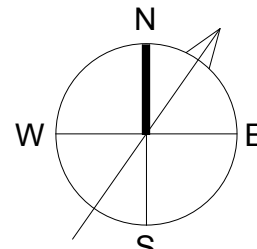
GROUND FLOOR - PROPOSED

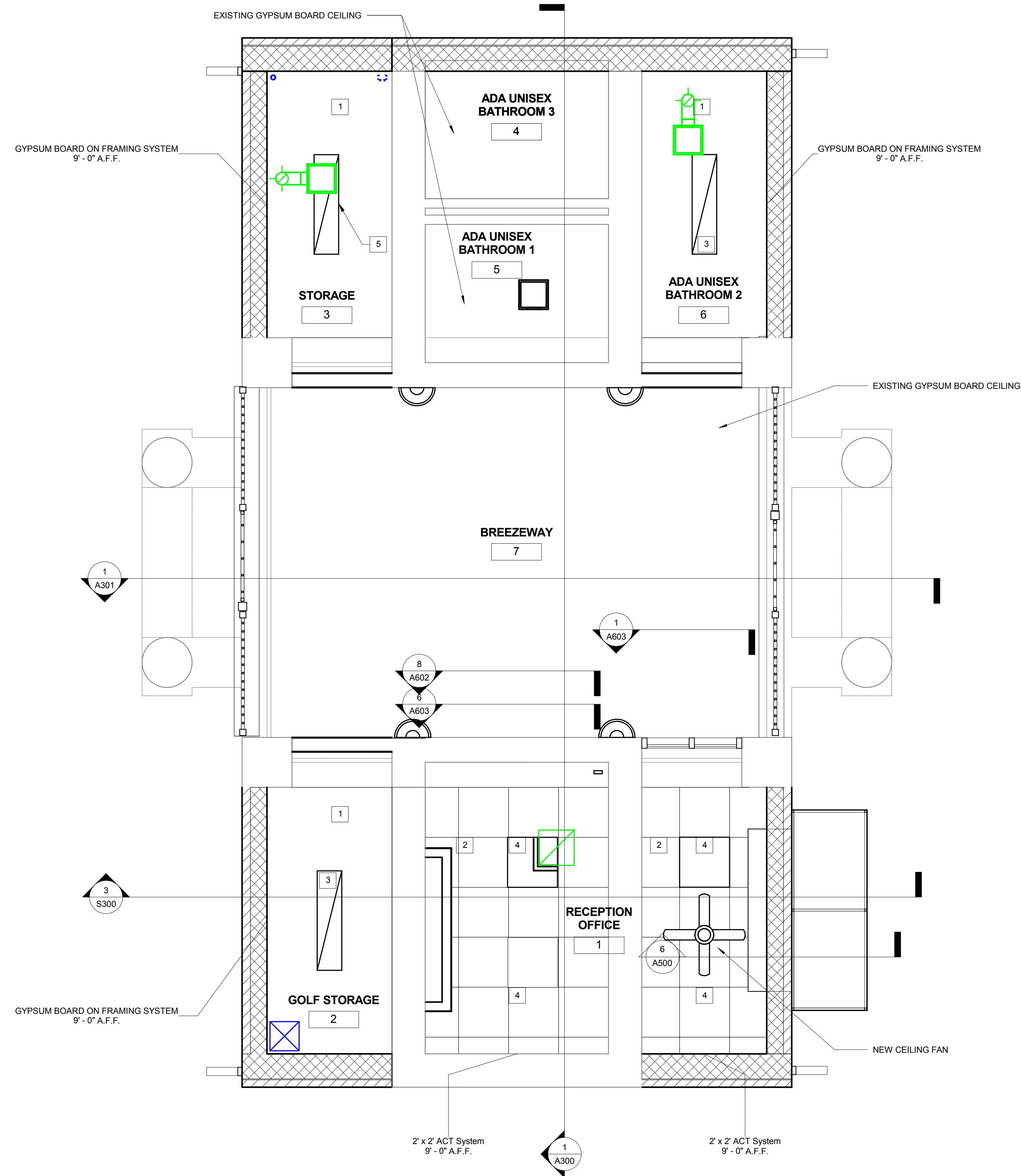
Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number
12-0009.012
Date
06.30.2016
Drawing Scale: AS NOTED
CADD Filename
Revit Model
CADD Plot Scale
1:1

Drawn By
ASM
Checked By
AV

Sheet Number
A102





1 REFLECTED CEILING PLAN
A103
3/8" = 1'-0"

GENERAL NOTES

- 1.) AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE WORKING ENVIRONMENT PER OSHA STANDARDS. ROOF INSTALLERS SHALL BE CERTIFIED AND EXPERIENCED. THE CREW MEMBERS AND SUPERVISORS SHALL WEAR ALL REQUIRED PERSONAL PROTECTION EQUIPMENT, SAFE SAFETY HARNESS AND USE SECURED SHORING.
- 2.) THE SUBSTRATE MUST BE SECURELY FASTENED TO STRUCTURE. IF IT IS FOUND UNSTABLE, IMMEDIATELY NOTIFY THE ARCHITECT AND THE OWNER.
- 3.) THE SUBSTRATE MUST BE CLEAN, DRY, STRUCTURALLY SOUND, FREE OF LOOSE MATERIAL, VOIDS, PROJECTIONS, HOT SPOTS, RELEASE AGENTS, COATINGS, OR OTHER MATERIALS THAT MAY AFFECT ADHESION.
- 4.) THERE SHALL BE NO PLANAR IRREGULARITIES GREATER THAN 6.4 MM (1/4 IN) WITHIN ANY 1.2 M (4 FT) RADIUS.
- 5.) PRODUCTS AND INSTALLATION SHALL BE SUBJECTED TO A WRITTEN WARRANTY FROM THE CONTRACTOR FOR A PERIOD OF 20 YEARS MINIMUM, WITH PROVISION TO RENDER ALL SERVICES NECESSARY TO MITIGATE ANY AND ALL DAMAGE TO THE PROPERTY IF OCCURS DURING THE WARRANTED PERIOD DUE TO FAILURE OF ROOFING, AT NO COST TO THE GOVERNMENT (OWNER).

NEW WORK LEGEND

- 1.) INSTALL NEW GYPSUM BOARD CEILING SYSTEM COMPRISED OF A FURRING CHANNEL @ 24" O.C. WITH 1/2" GYPSUM BOARD TAPED, FINISHED AND PAINTED.
- 2.) INSTALL NEW 2' X 2' ACOUSTICAL CEILING TILE SYSTEM.
- 3.) INSTALL NEW 1' X 4' CEILING MOUNTED LIGHT FIXTURE AS SPECIFIED ON PAGE EL501.
- 4.) INSTALL NEW 2' X 2' CEILING MOUNTED LIGHT FIXTURE AS SPECIFIED ON PAGE EL501.
- 5.) INSTALL NEW 1' X 4' CEILING MOUNTED LIGHT FIXTURE AS SPECIFIED ON PAGE EL501.

RCP LEGEND

- GYPSUM CEILING
- 2X2 PERFORATED ACOUSTICAL CEILING TILE
- 1X4 RECESSED LIGHT FIXTURE
- 2'-0" X 2'-0" CEILING LIGHT
- CEILING FAN
- SCONE LIGHT
- EXHAUSTER WITH CABINET - CEILING MOUNTED



MINIATURE GOLF PARK OFFICE BUILDING RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

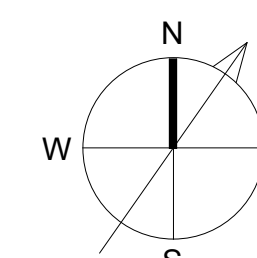
Drawing Title

REFLECTED CEILING PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model 1:1

Drawn By ASM	Checked By AV
Sheet Number A103	

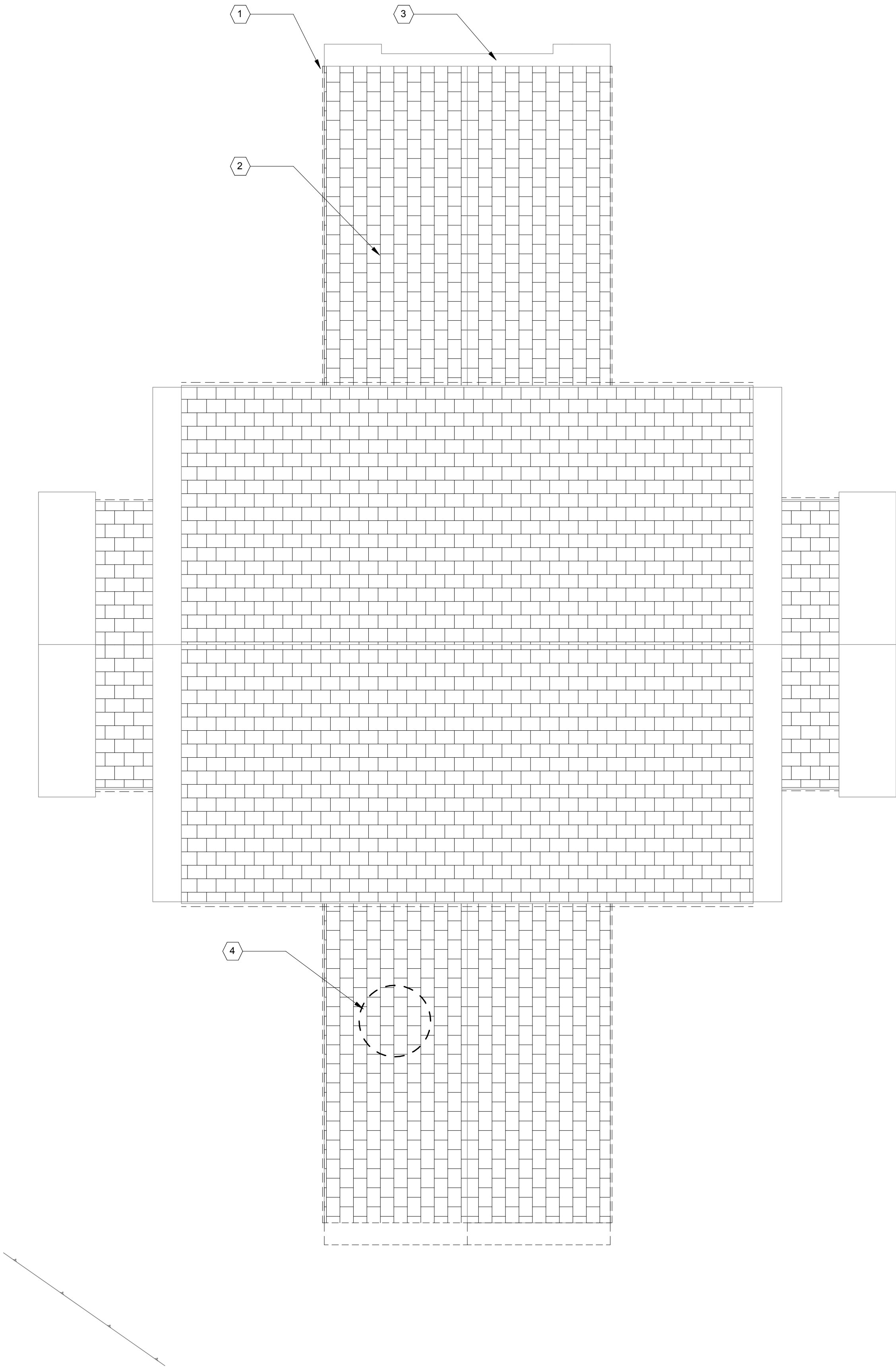


DEMOLITION NOTES

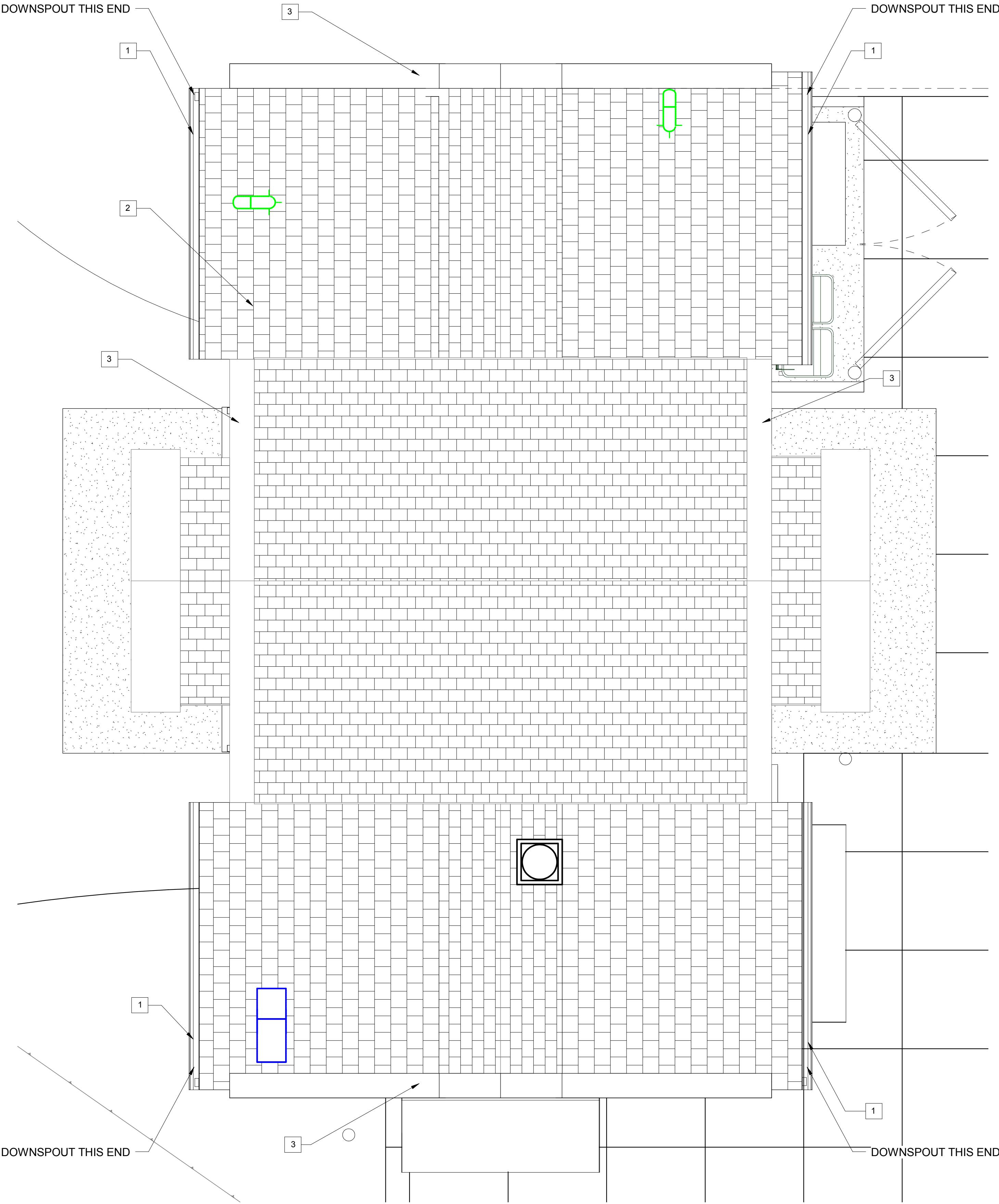
- 1. REMOVE ALL EXISTING GUTTERS FROM ROOF
- 2. REMOVE ALL EXISTING SHINGLE ROOFING AND UNDERLAYMENT FROM ENTIRE ROOF
- 3. REMOVE ALL EXISTING ROOF ACCENTS AND FLASHING AS NECESSARY FOR SHINGLE REPLACEMENT
- 4. DEMOLISH ROOF FAN

NEW WORK NOTES

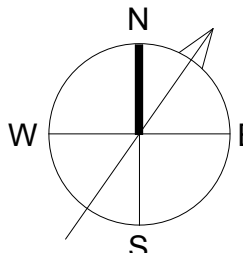
- 1. PROVIDE AND INSTALL NEW GUTTER TO MATCH PROFILE AND FINISH OF EXISTING, WITH DOWNSPOUT TO DRAIN TO DAYLIGHT
- 2. INSTALL NEW ELASTOMERIC MEMBRANE AND ARCHITECTURAL 3D SHINGLES TO MATCH EXISTING WATERPARK ADMIN. BUILDING ON ENTIRE ROOF
- 3. INSTALL NEW ROOF ACCENTS AND FLASHING TO MATCH EXISTING



3 ROOF PLAN - DEMOLITION
A104/ A200 3/8" = 1'-0"



1 ROOF PLAN - PROPOSED
A104/ A200 3/8" = 1'-0"



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

ROOF PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By Author

Checked By AV

Sheet Number

A104



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

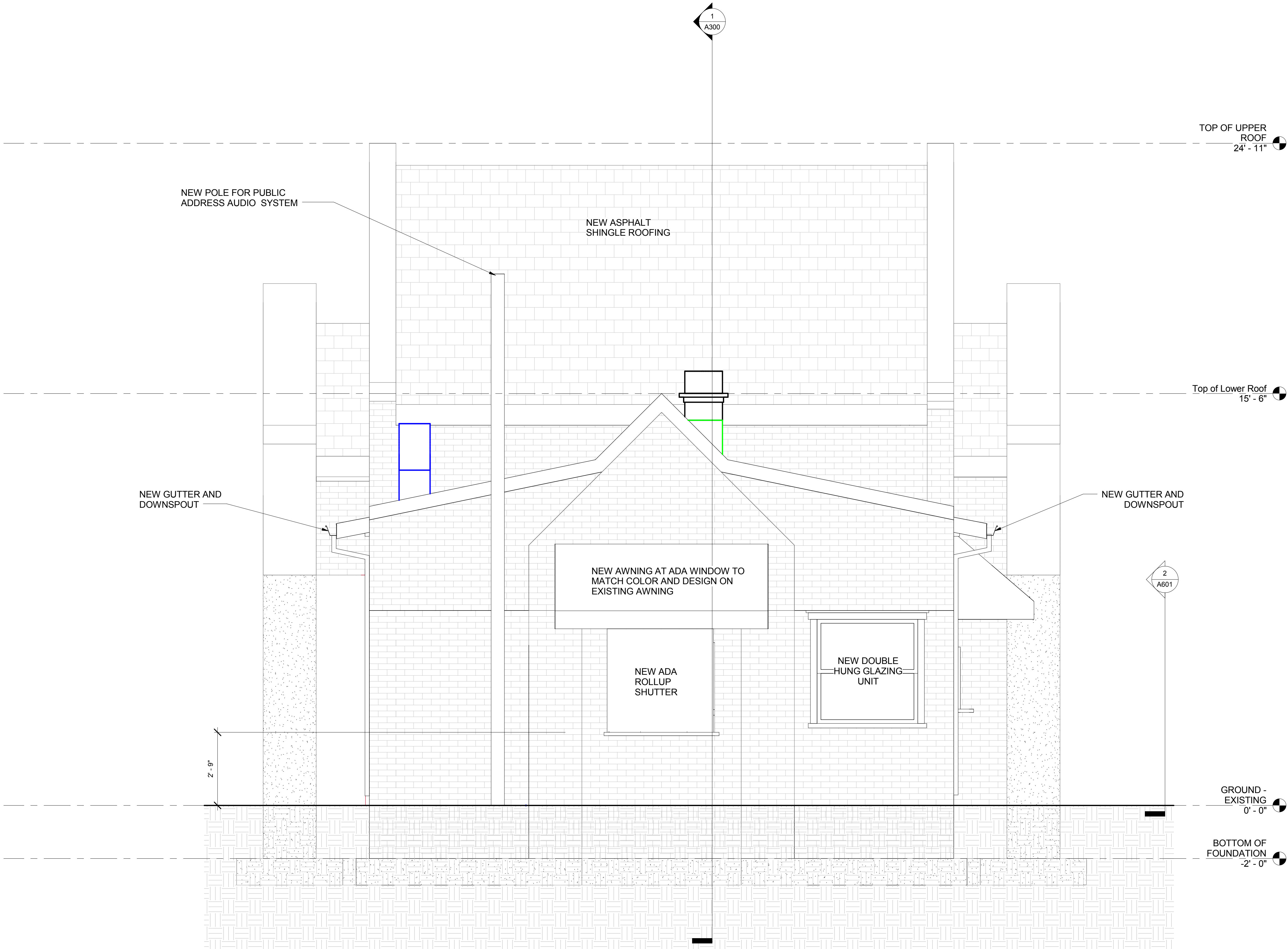
WEST ELEVATION

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%


AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By ASM	Checked By AV
Sheet Number A200	

ARCHITECT
License #15975
TAE Y. JUNG
STATE OF MARYLAND



1 WEST ELEVATION
A200 1/2" = 1'-0"



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

EAST ELEVATION

Phase

☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number
12-0009.012

Drawing Scale: AS NOTED

Date
06.30.2016

CADD Filename
Revit Model

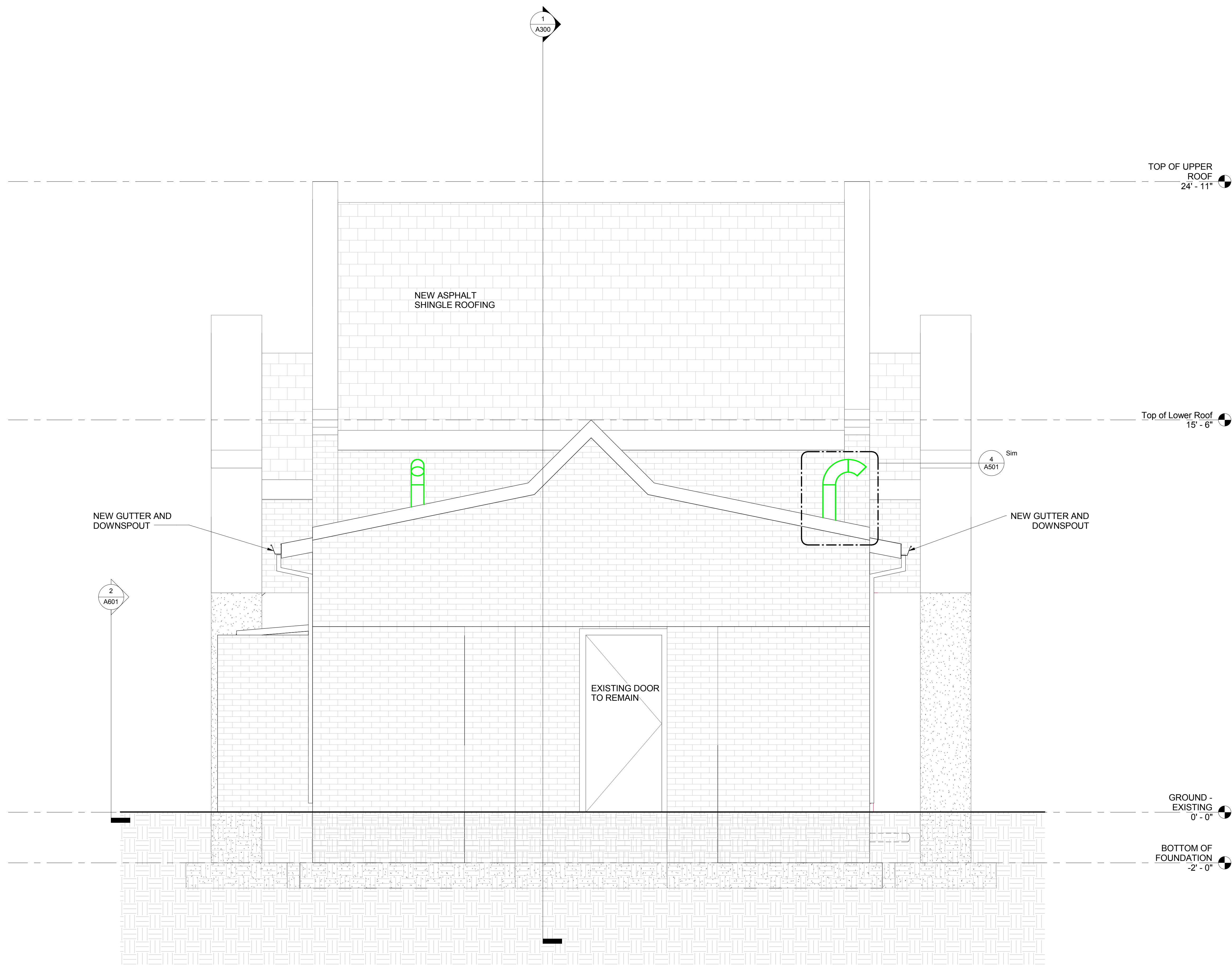
CADD Plot Scale
1:1

Architect
TAE Y. JUNG
License #15975
STATE OF MARYLAND

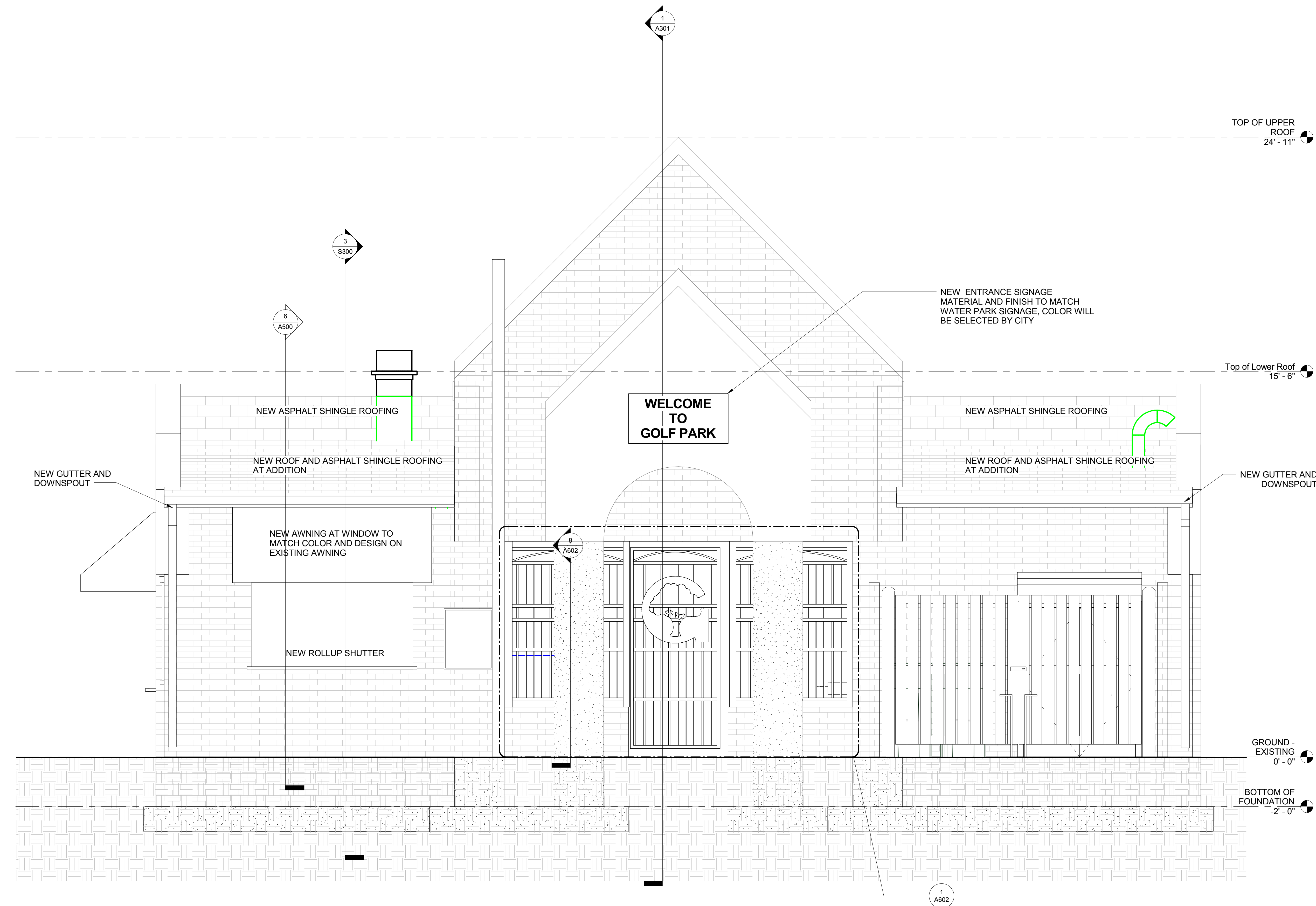
Drawn By
ASM

Checked By
AV

Sheet Number
A201



1 EAST ELEVATION
A201 1/2" = 1'-0"



1 SOUTH ELEVATION
A202 1/2" = 1'-0"



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

SOUTH ELEVATION

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number 12-0009.012 Drawing Scale: AS NOTED

Date 06.30.2016 CADD Filename Revit Model CADD Plot Scale 1:1

Drawn By ASM

Checked By AV

Sheet Number

A202



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

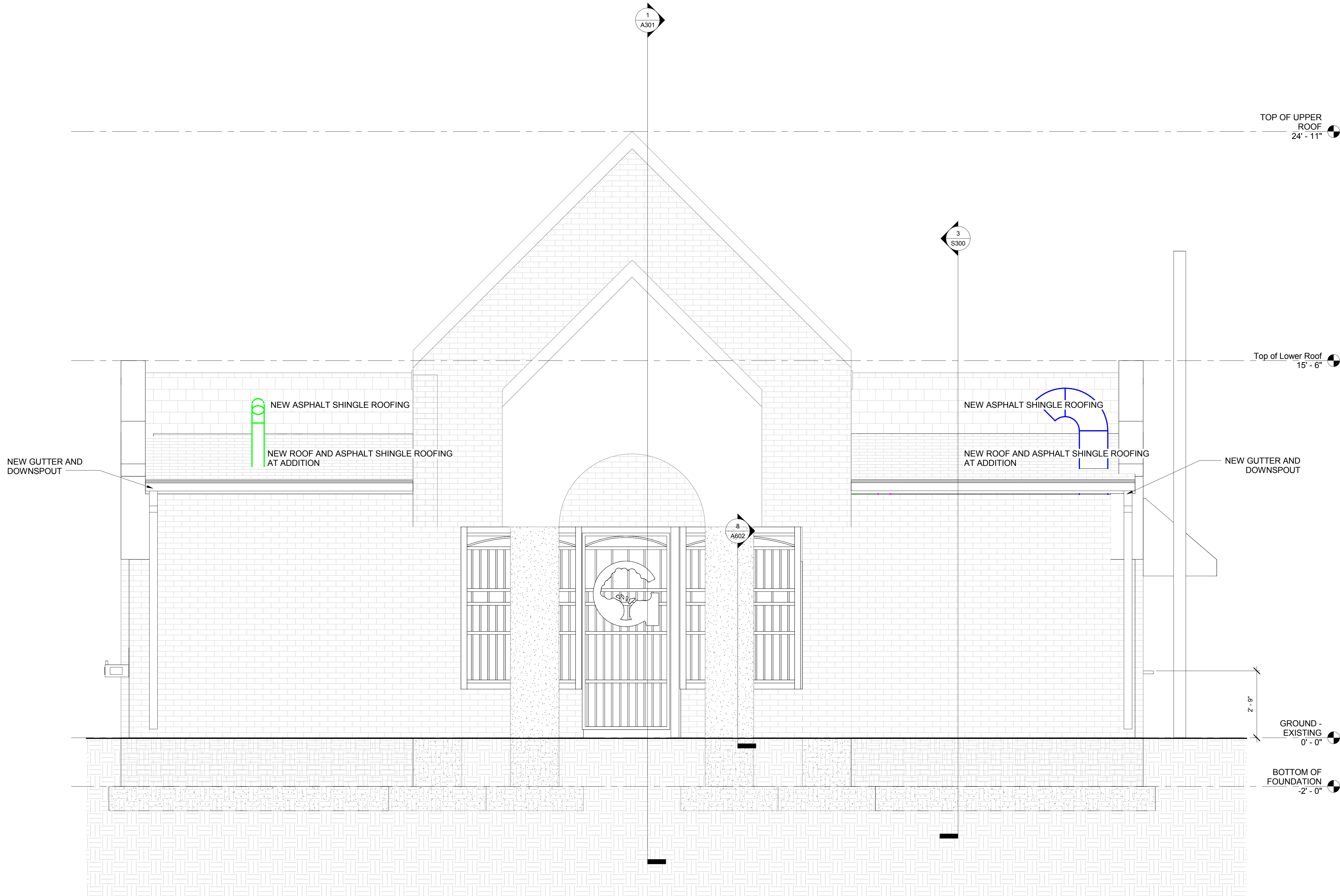
Drawing Title

NORTH ELEVATION

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number
12-0009.012
Drawing Scale: AS NOTED
CADD Filename
Revit Model
Date
06.30.2016
CADD Plot Scale
1:1

Architect
TAE Y. JUNG
STATE OF MARYLAND
License #15975
Drawn By
ASM
Checked By
AV
Sheet Number
A203



1 NORTH ELEVATION
A203 1/2" = 1'-0"

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

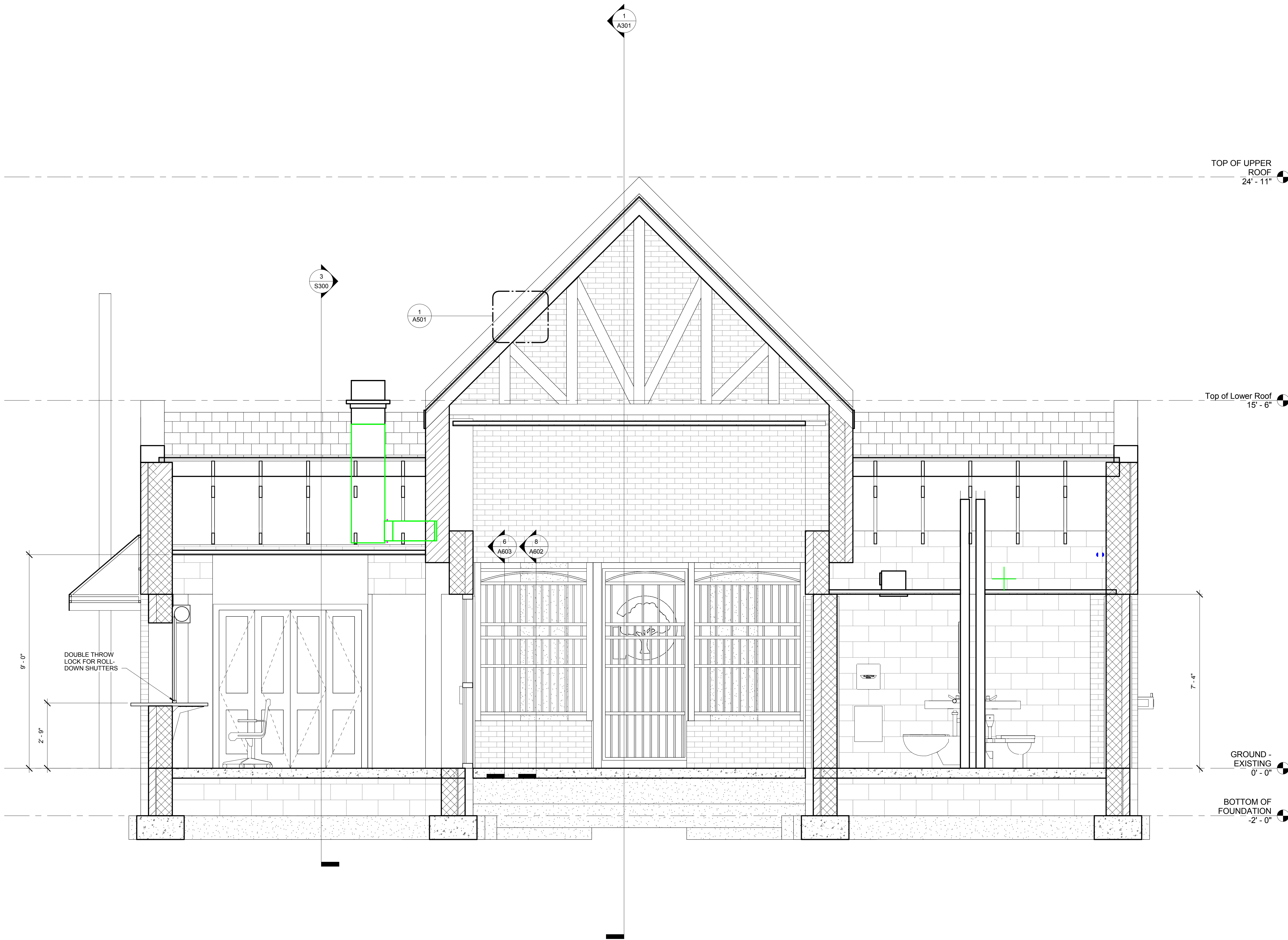
Drawing Title

LONG BUILDING SECTION


Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number
12-0009.012
Drawing Scale: AS NOTED
CADD Filename
Revit Model
Date
06.30.2016
CADD Plot Scale
1:1

Drawn By
ASM
Checked By
AV
Sheet Number
A300



1 LONG BUILDING SECTION
A300 1/2" = 1'-0"



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title


SHORT SECTION THROUGH LOBBY

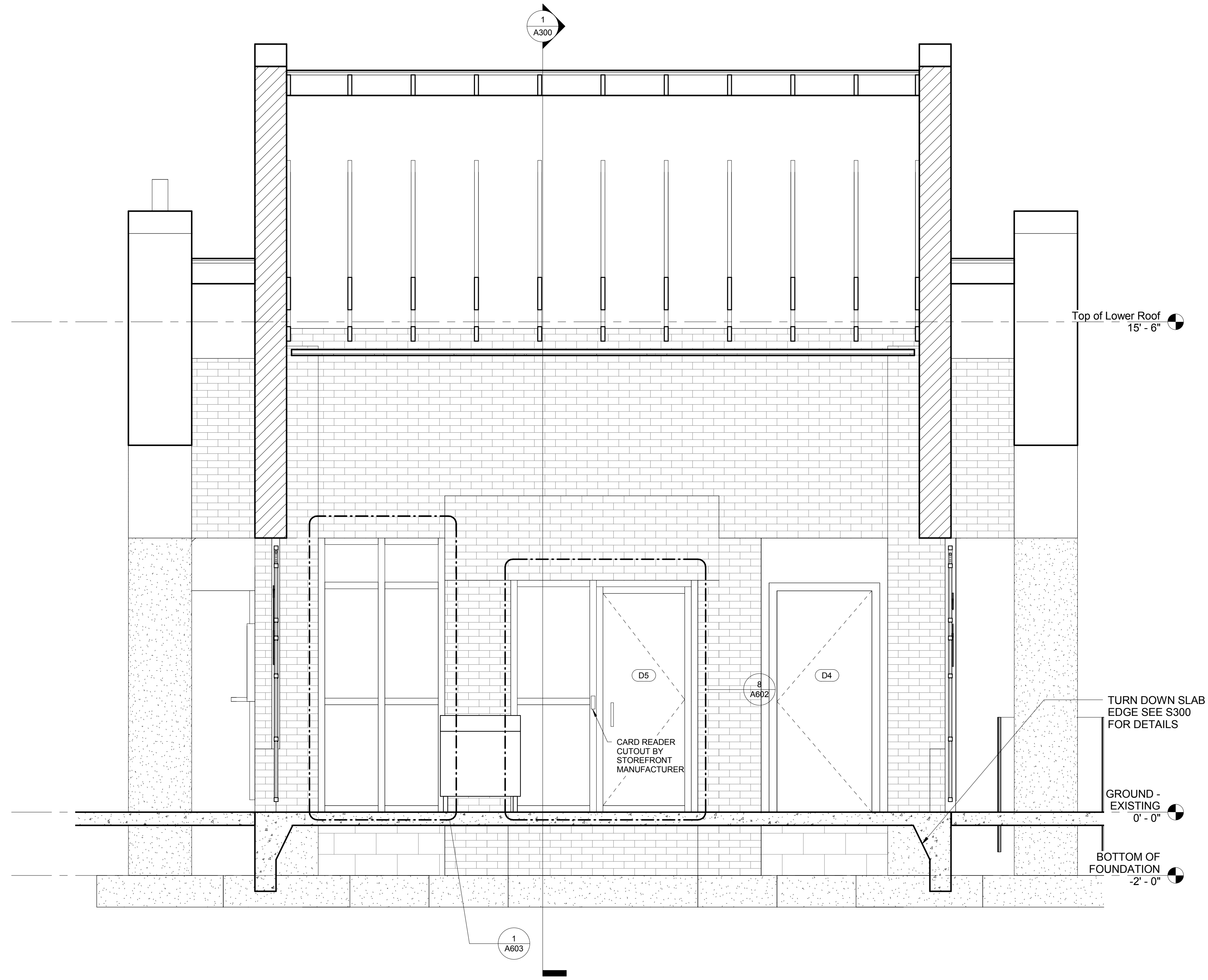
Phase

☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	

Drawn By ASM
Checked By AV
Sheet Number A301





1 SHORT SECTION THROUGH LOBBY
A301 1/2" = 1'-0"

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

INTERIOR ELEVATIONS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

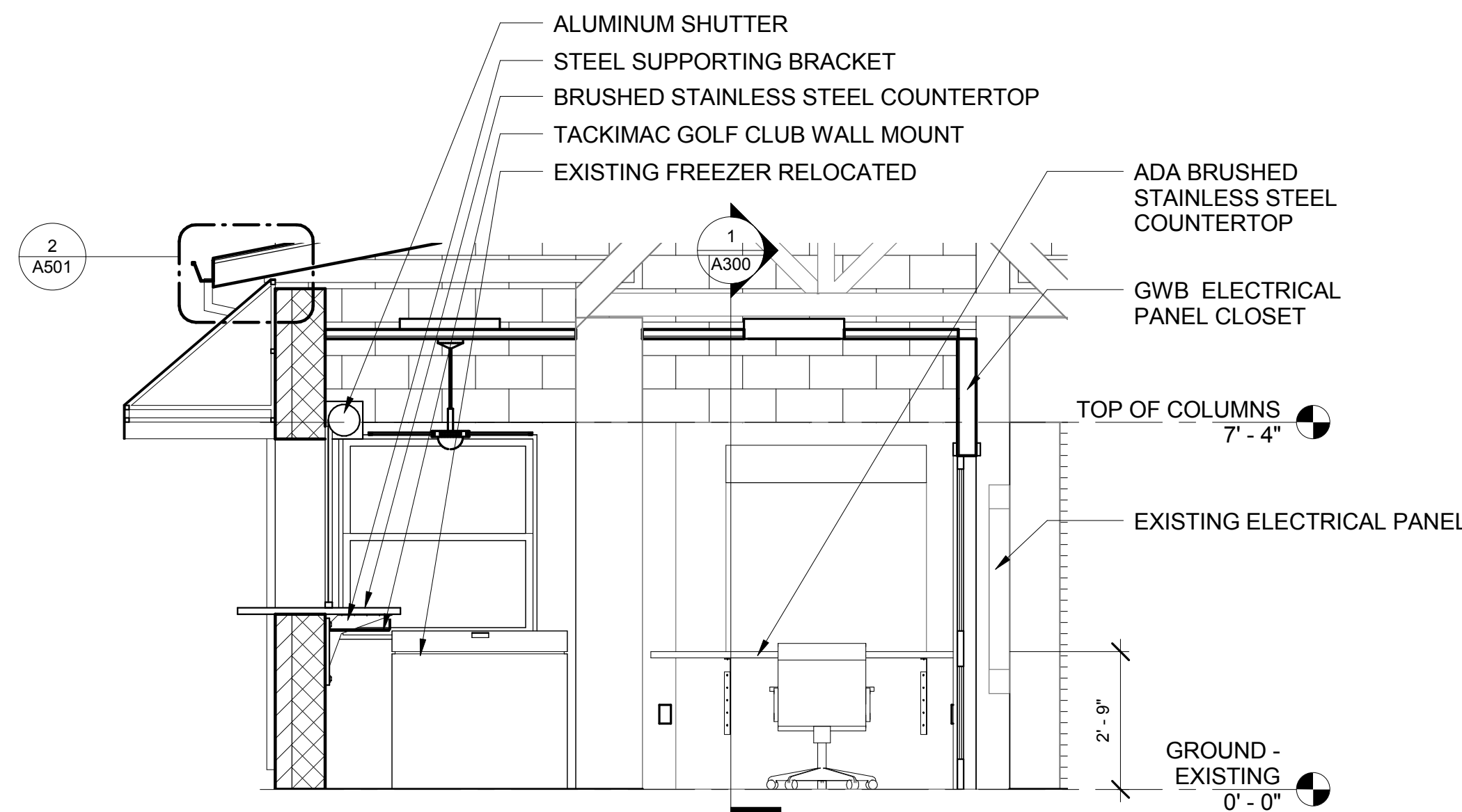
A/E Project Number
12-0009.012
Date
06.30.2016
Drawing Scale: AS NOTED
CADD Filename
Revit Model
1:1

Drawn By
ASM &PG

Checked By
AV

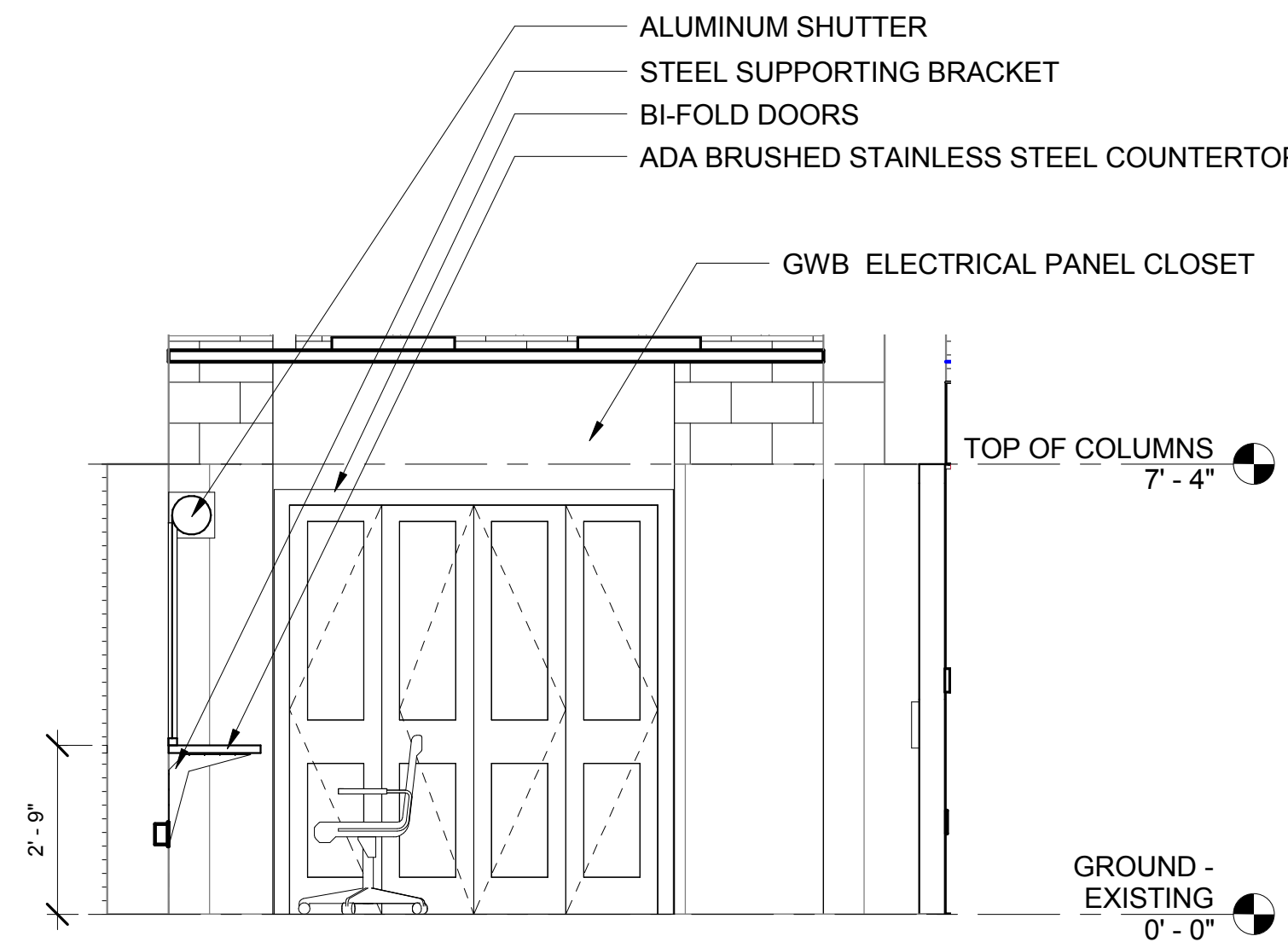
Sheet Number

A500



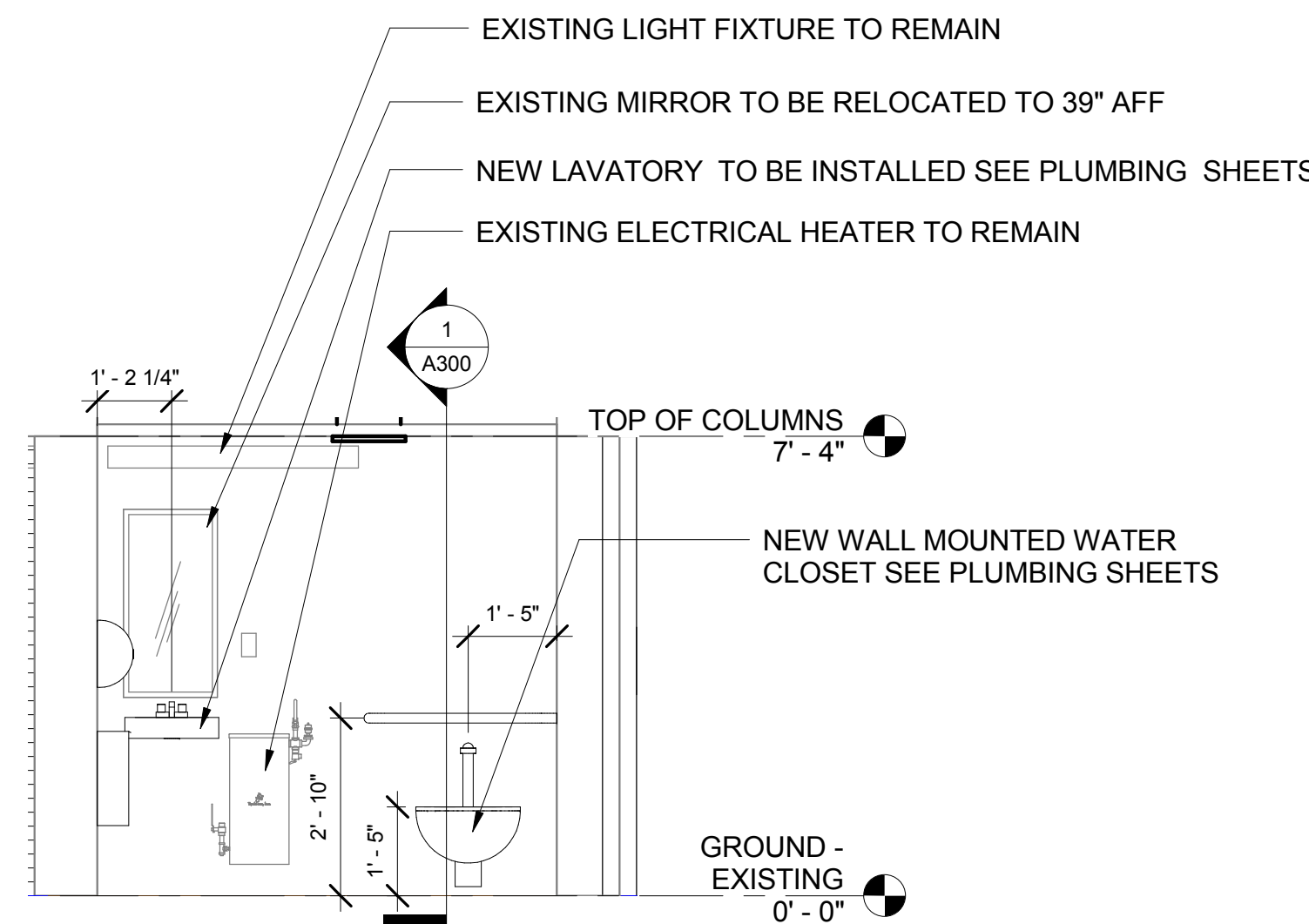
1 RECEPTION OFFICE INTERIOR SOUTH ELEVATION

A500
3/8" = 1'-0"



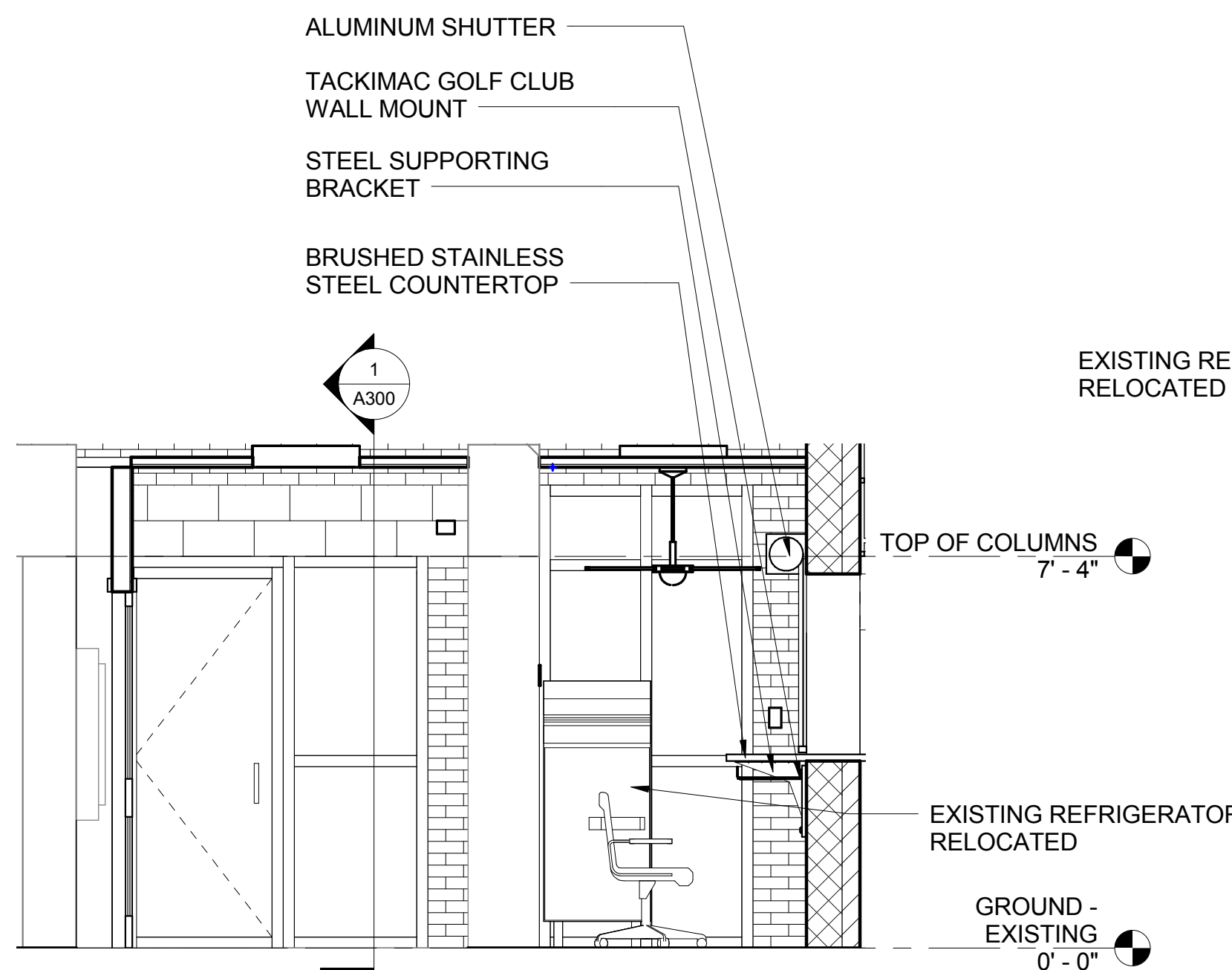
2 RECEPTION OFFICE INTERIOR WEST ELEVATION

A500
3/8" = 1'-0"



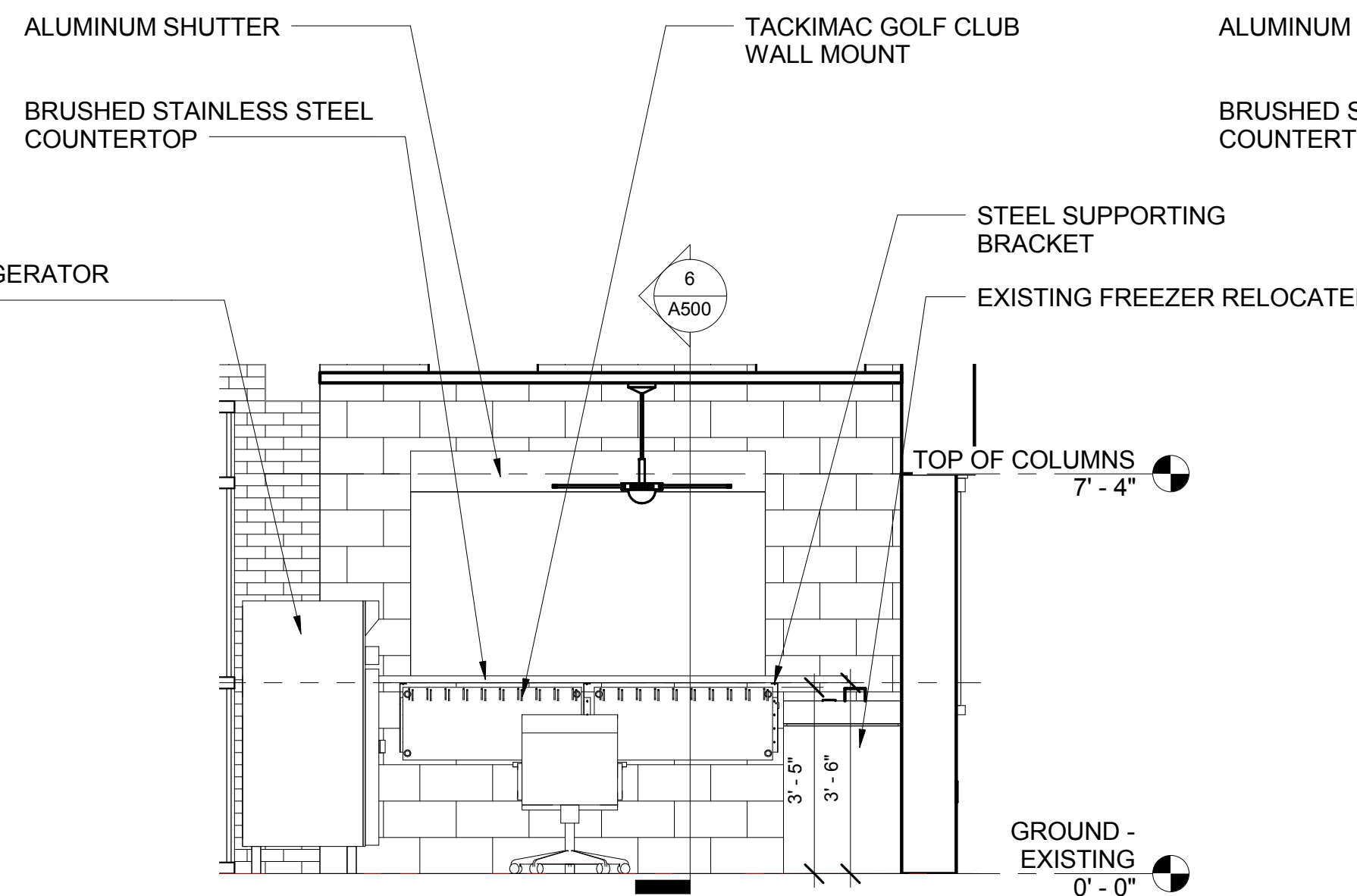
5 ADA BATHROOM ELEVATION

A500
3/8" = 1'-0"



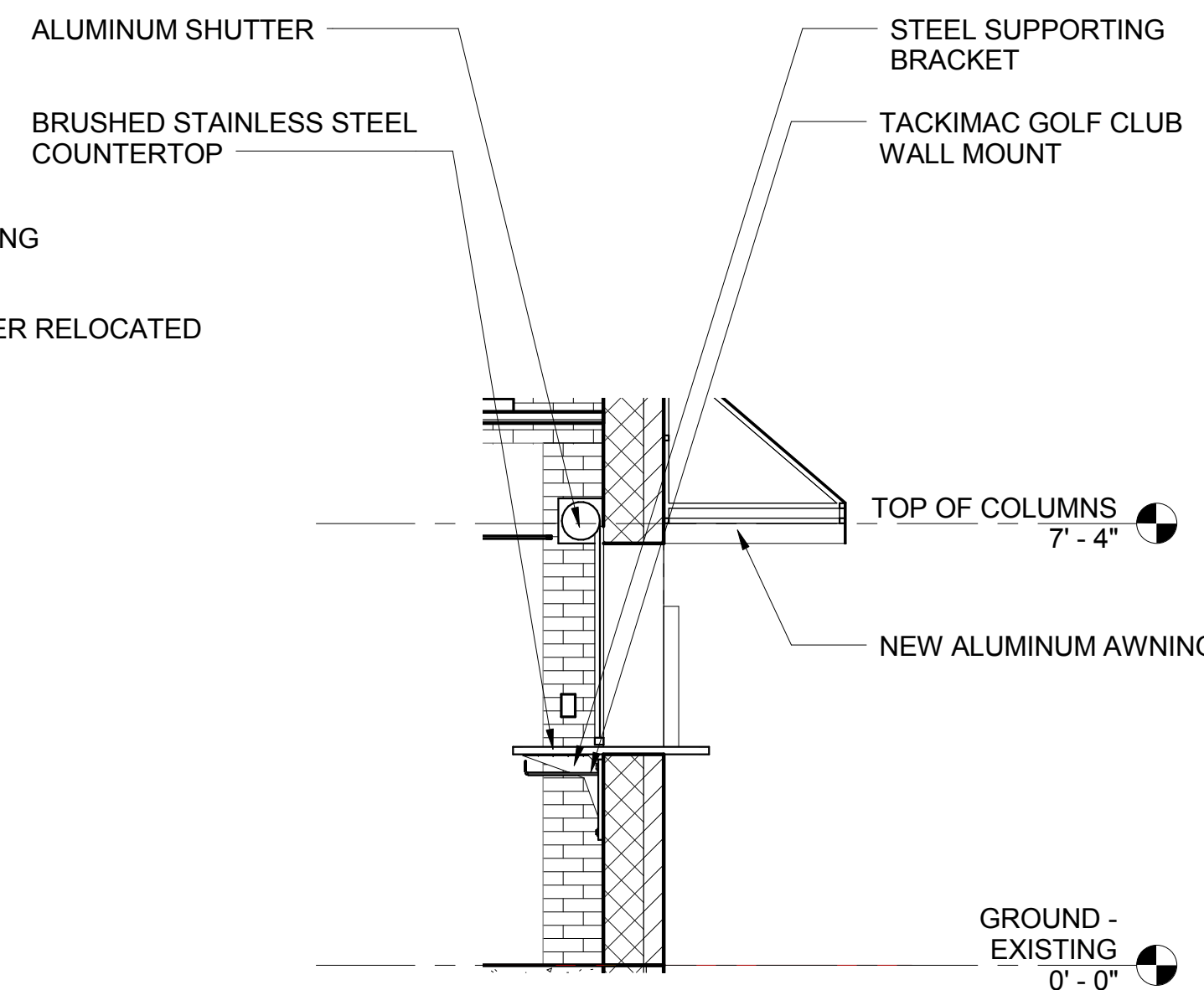
3 RECEPTION OFFICE INTERIOR NORTH ELEVATION

A500
3/8" = 1'-0"



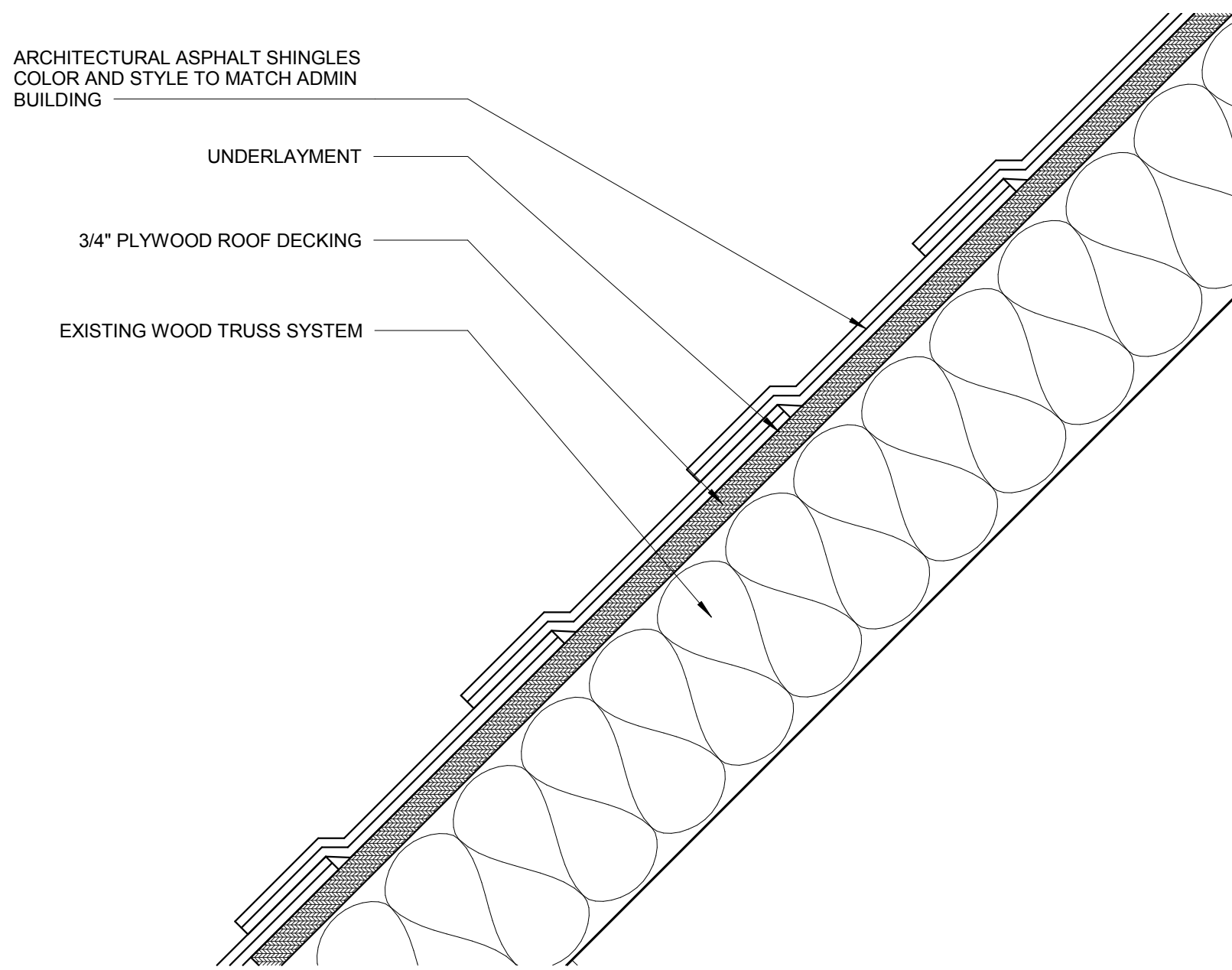
4 RECEPTION OFFICE INTERIOR EAST ELEVATION

A500
3/8" = 1'-0"

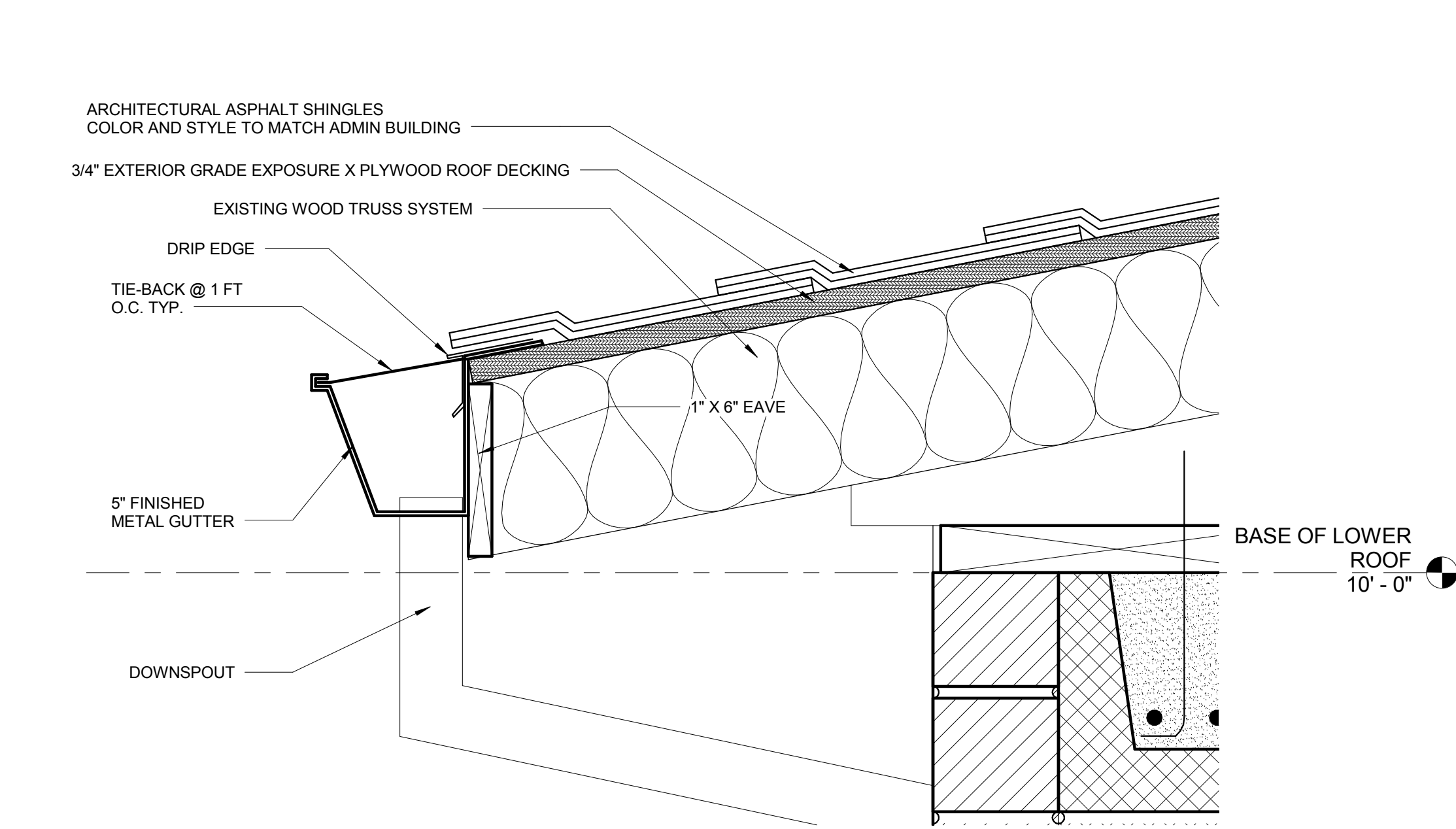


6 SHUTTER SECTION

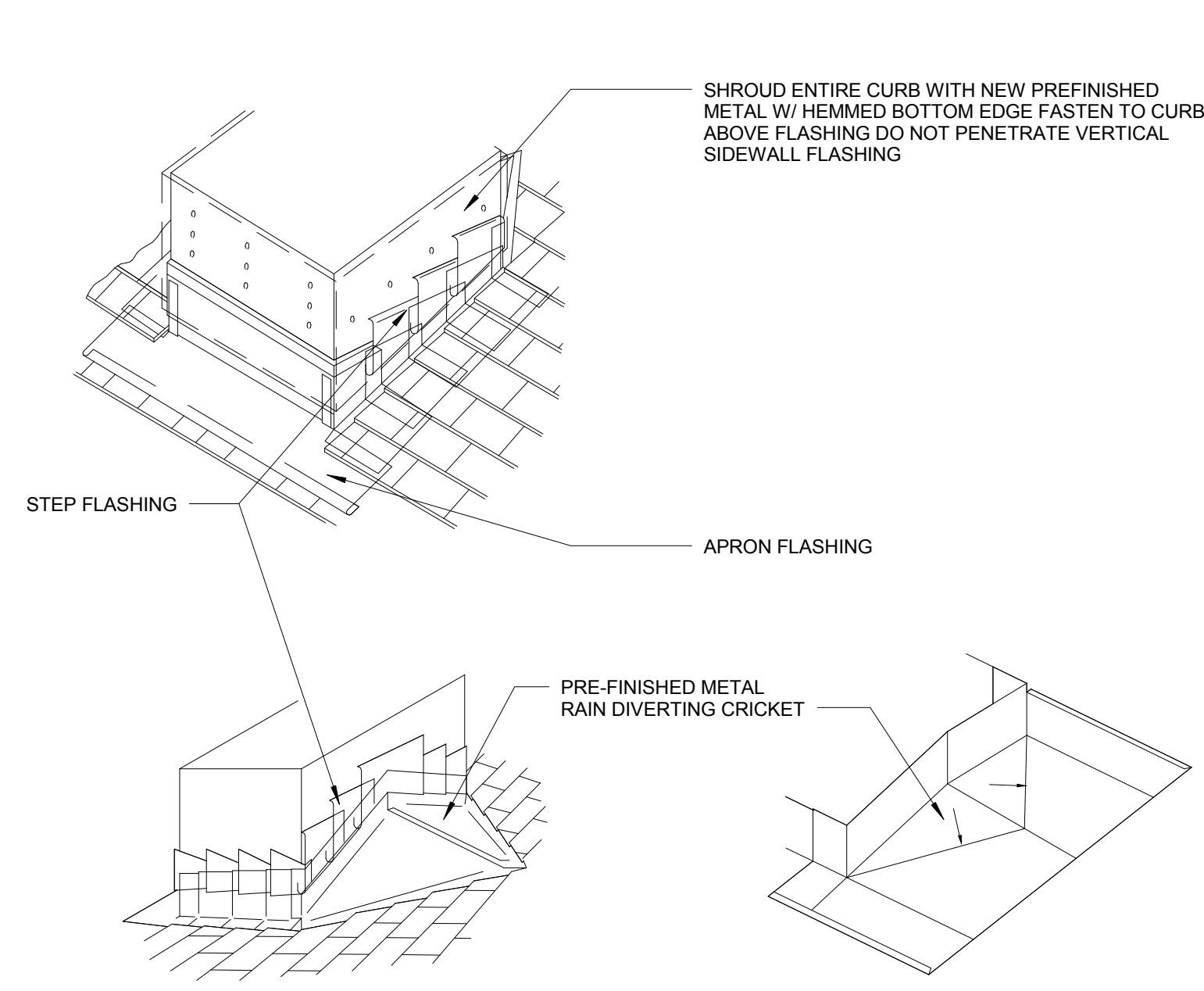
A500
3/8" = 1'-0"



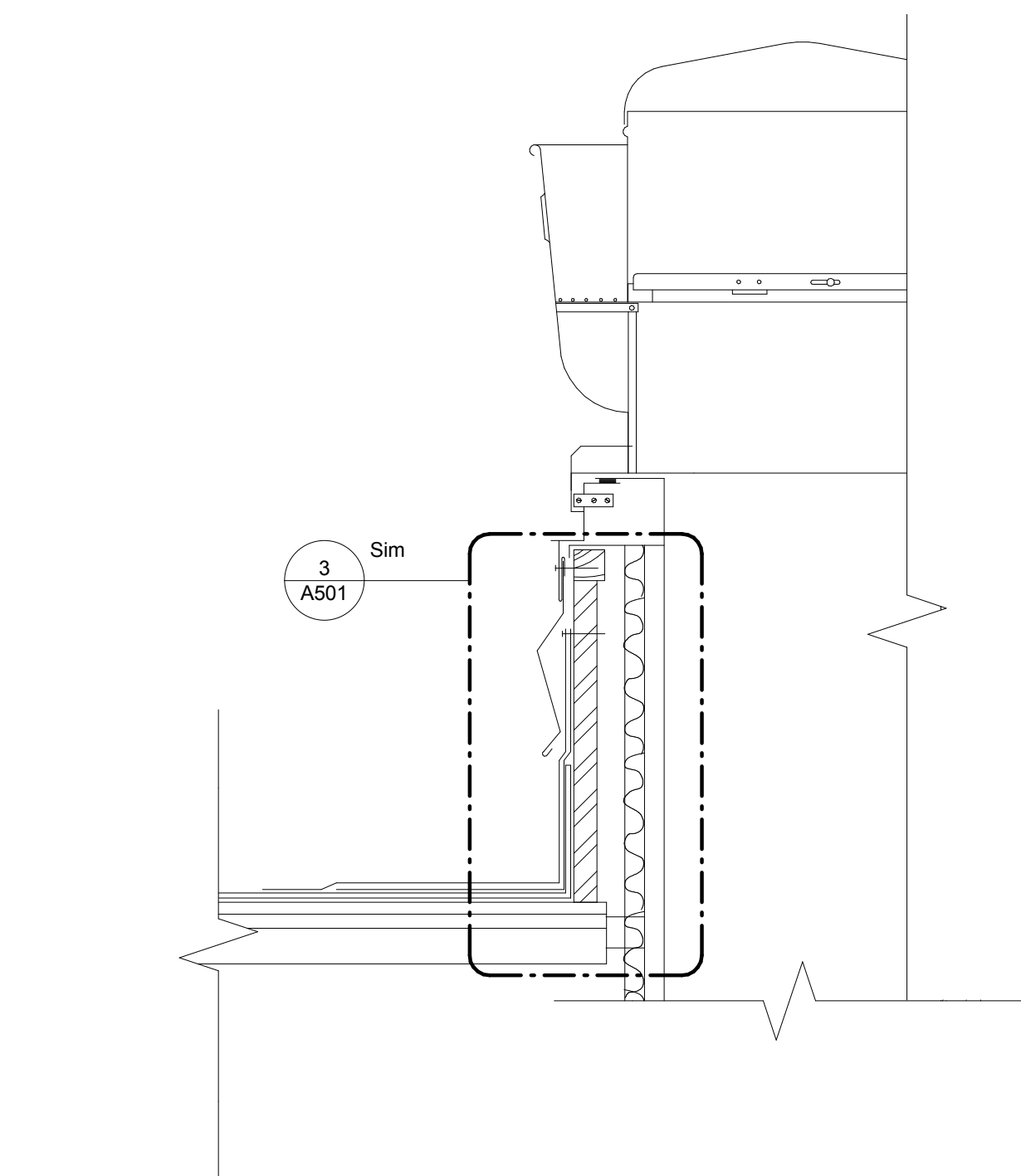
1 TYPICAL ROOF DETAIL
A501 NOT TO SCALE



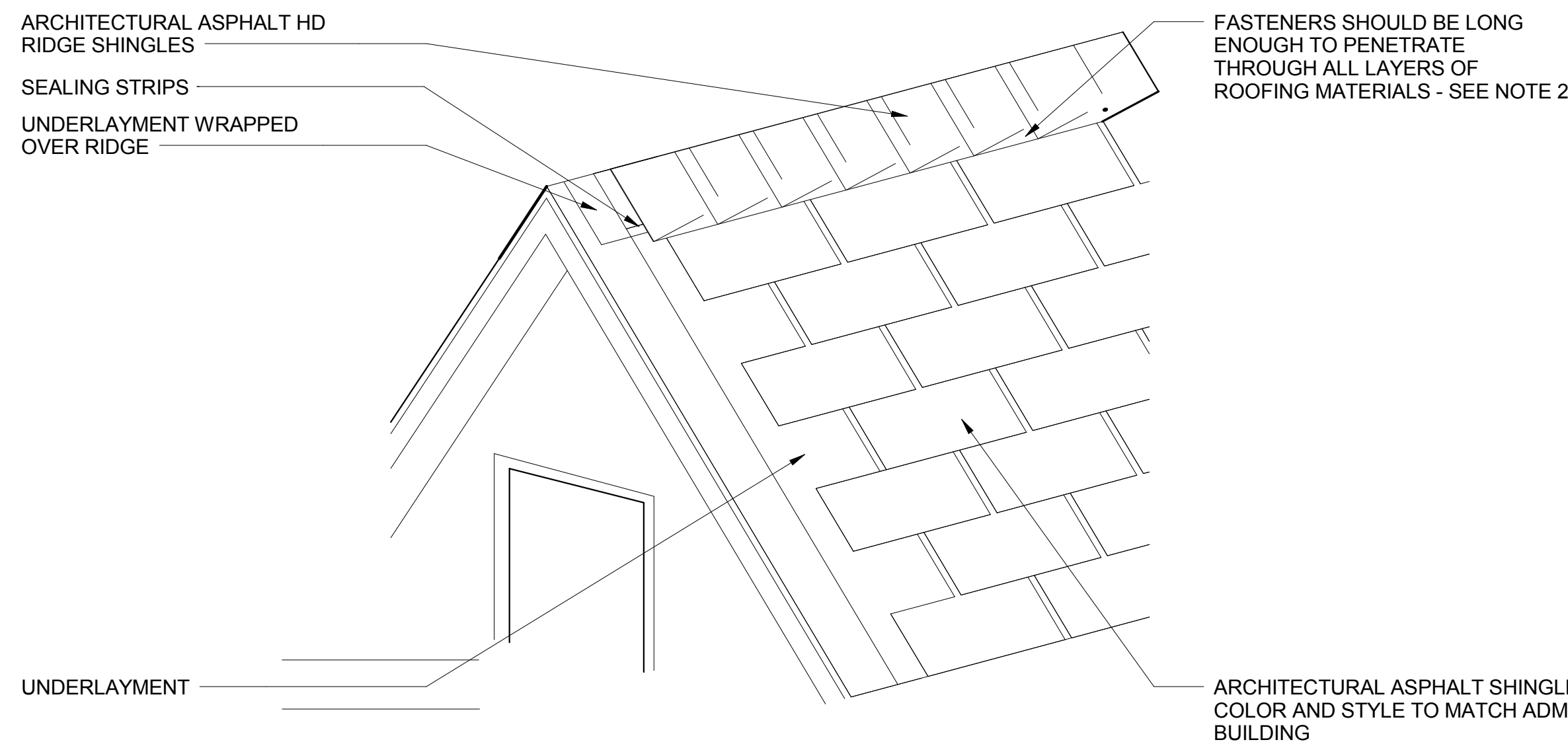
2 EAVE GUTTER DETAIL
A501 NOT TO SCALE



8 TYPICAL CURB FLASHING INSTALLATION DETAIL
A501 NOT TO SCALE

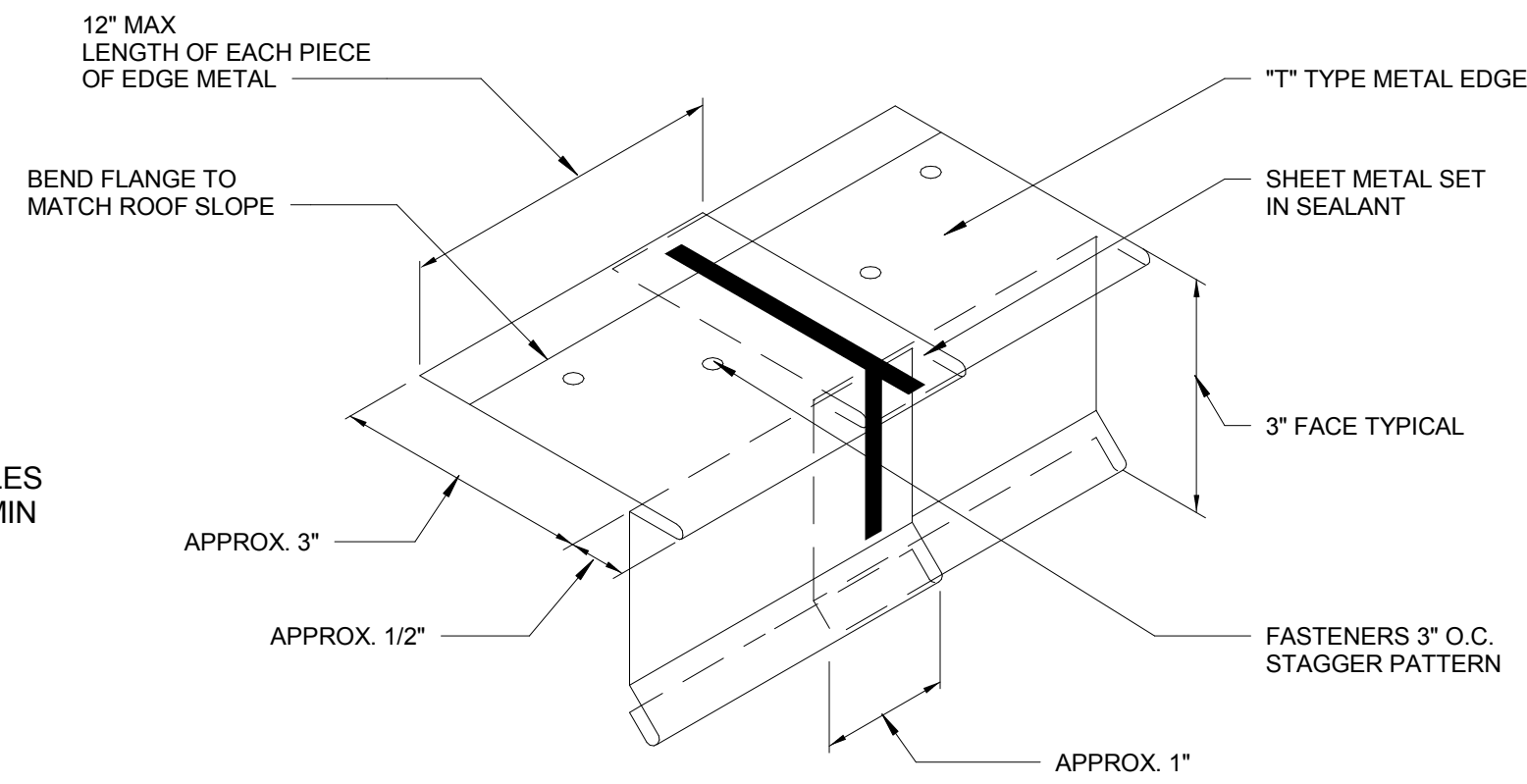


6 ROOF FAN DETAILS
A501 1/2 inch = NOT TO SCALE

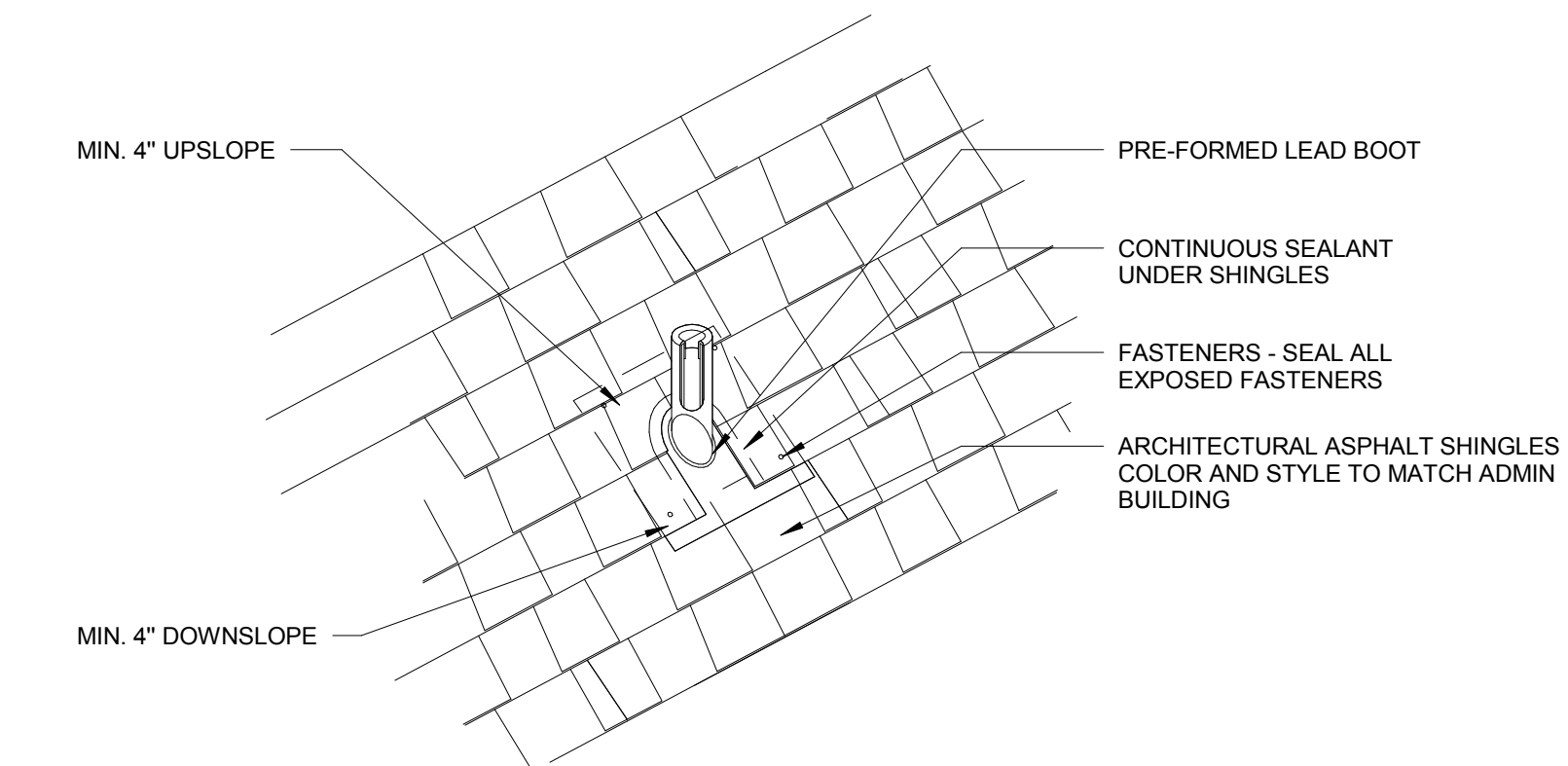


- NOTES:
1. MOST MANUFACTURERS SUPPLY SPECIAL RIDGE SHINGLES. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS.
 2. FASTENERS SHOULD EXTEND A MIN. 1/8 inch THROUGH UNDERSIDE OF ROOF DECK LESS THAN 3/4 inch THICK AND PENETRATE AT LEAST 3/4 inch INTO ROOF DECKS GREATER THAN 3/4 inch THICK.

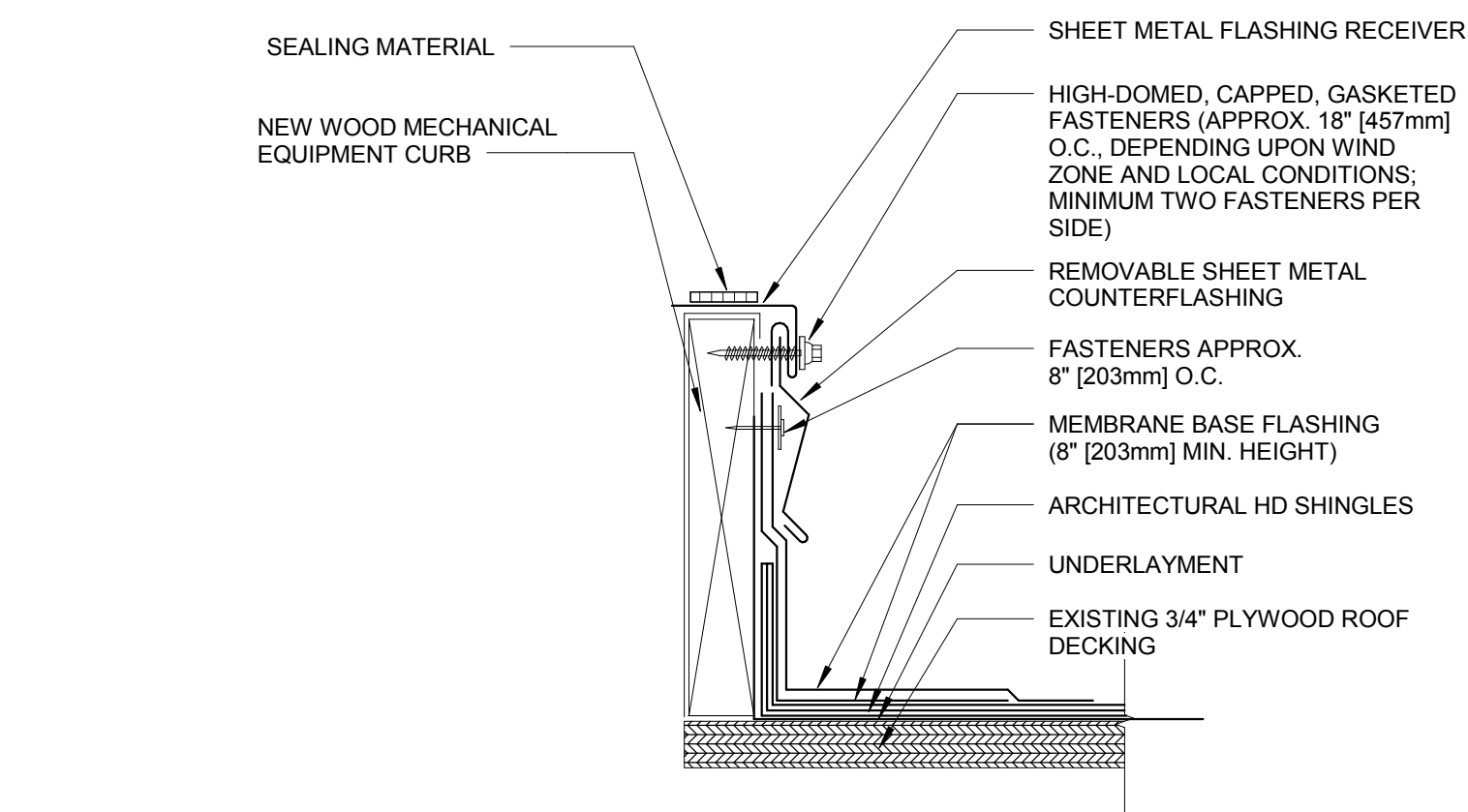
5 RIDGE DETAILS
A501 3 inch = 1'-0 inch NOT TO SCALE



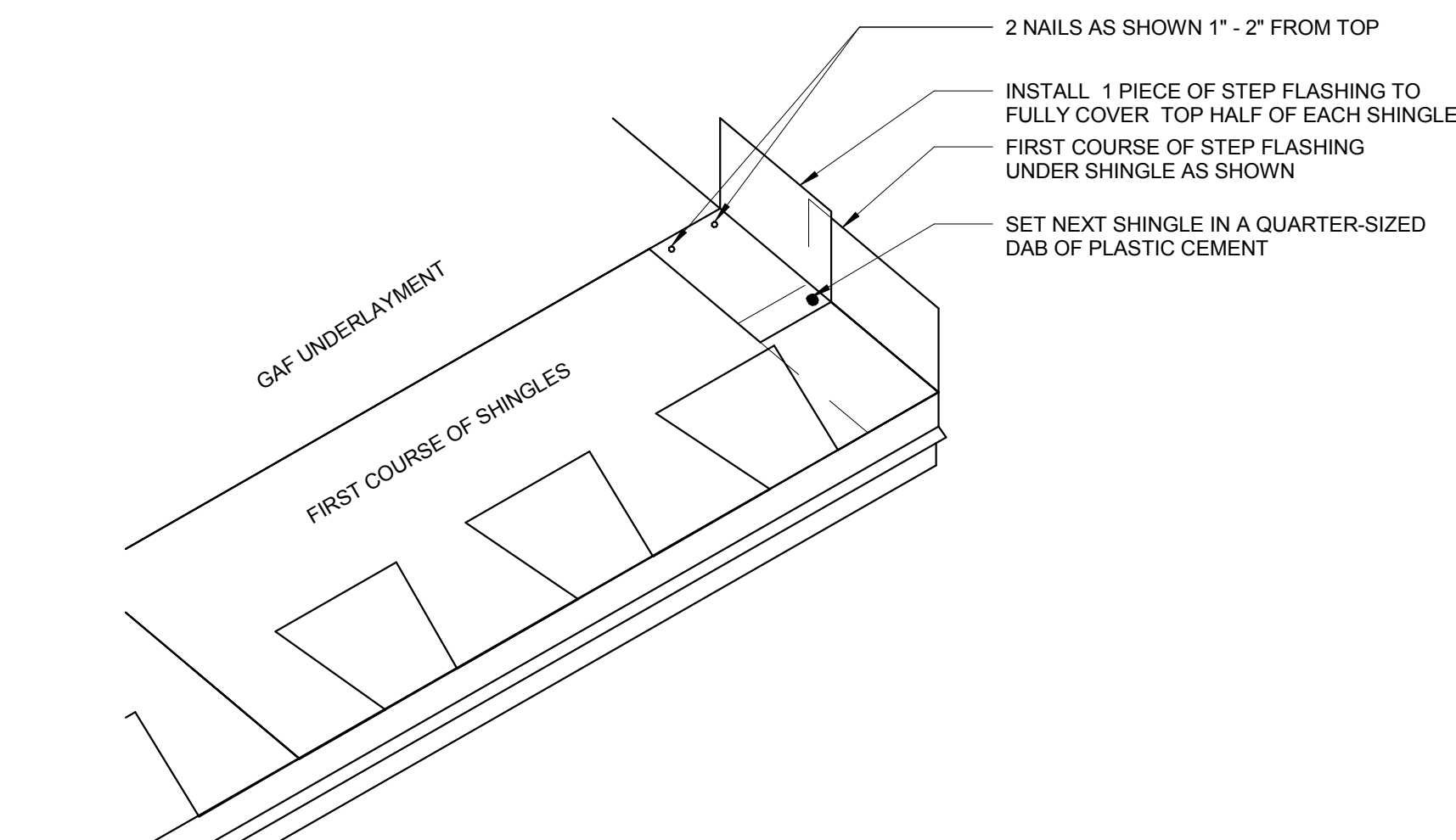
9 TYPICAL METAL DRIP EDGE
A501 12 inch = 1'-0 inch NOT TO SCALE



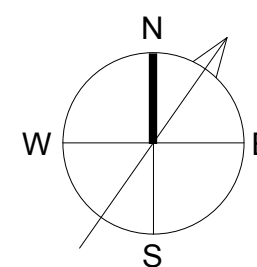
4 PIPE PENETRATION
A501 1 inch = 1' NOT TO SCALE



3 ROOF CURB DETAIL
A501 NOT TO SCALE



7 STEP FLASHING DETAIL
A501 NOT TO SCALE



A CHARACTER COUNTS! CITY

MINIATURE GOLF PARK OFFICE BUILDING RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

ROOF DETAILS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

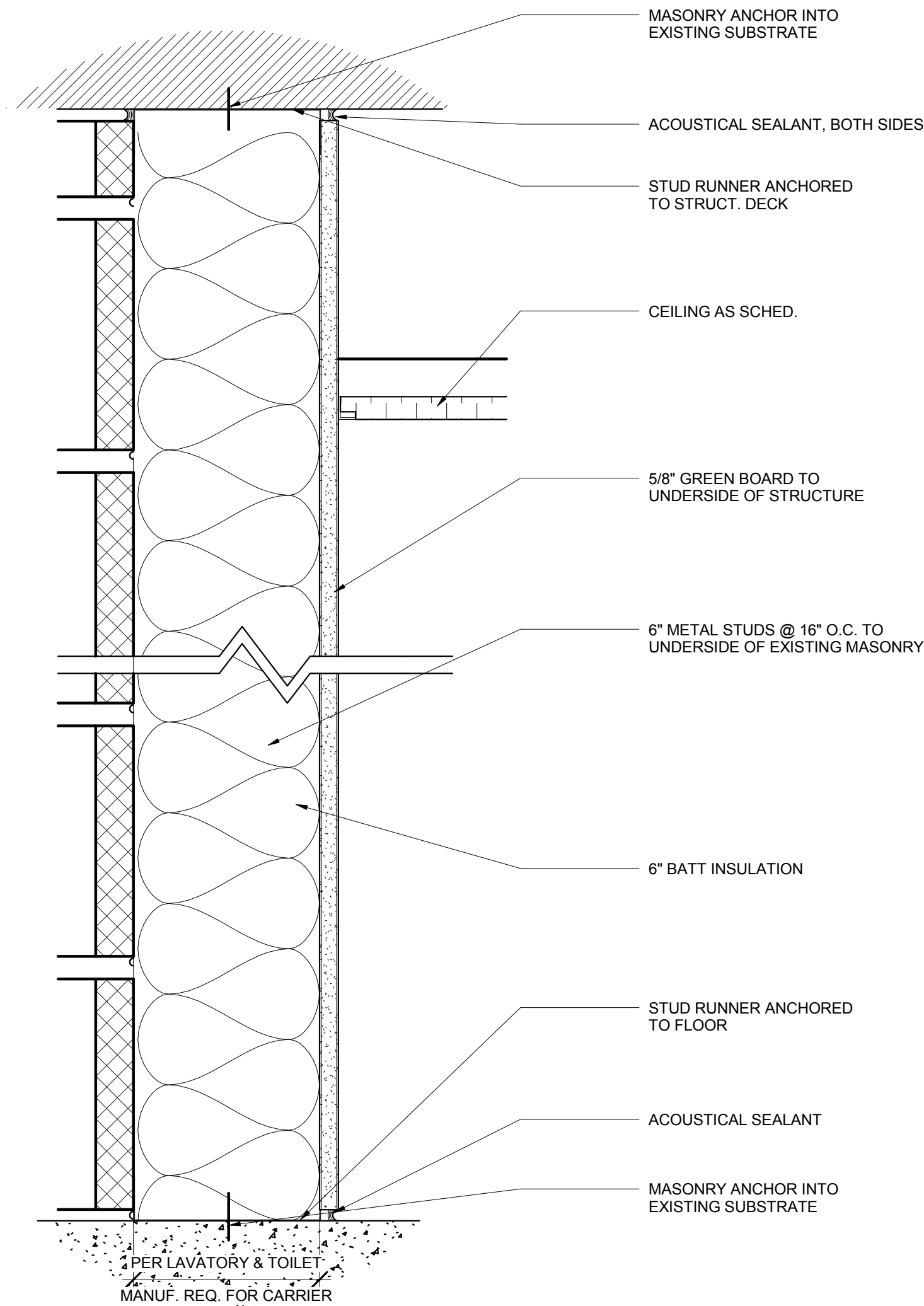
A/E Project Number
12-0009.012
Drawing Scale: AS NOTED

Date
06.30.2016
CADD Filename
Revit Model
CADD Plot Scale
1:1

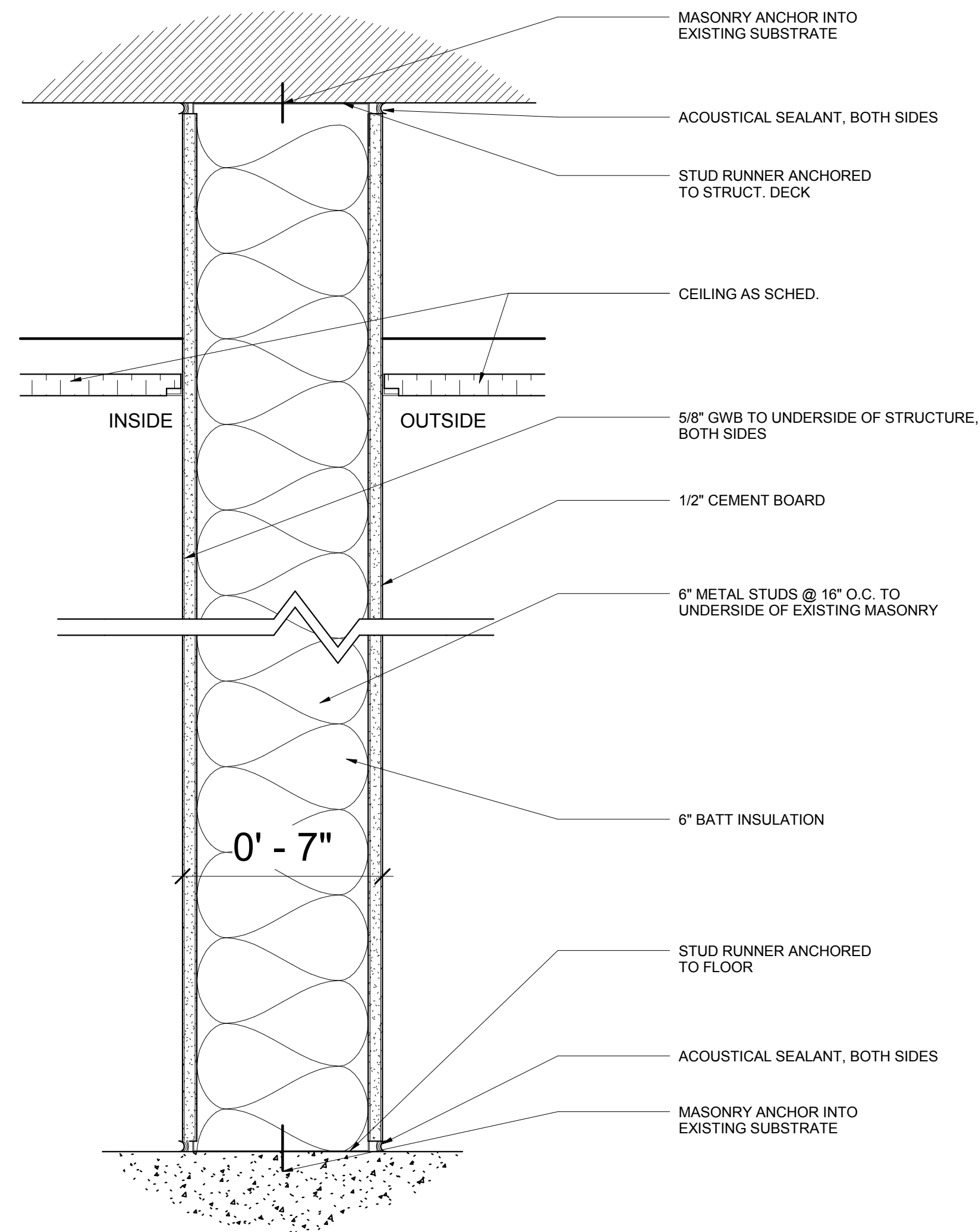
Drawn By
Author
Checked By
AV

Sheet Number
A501

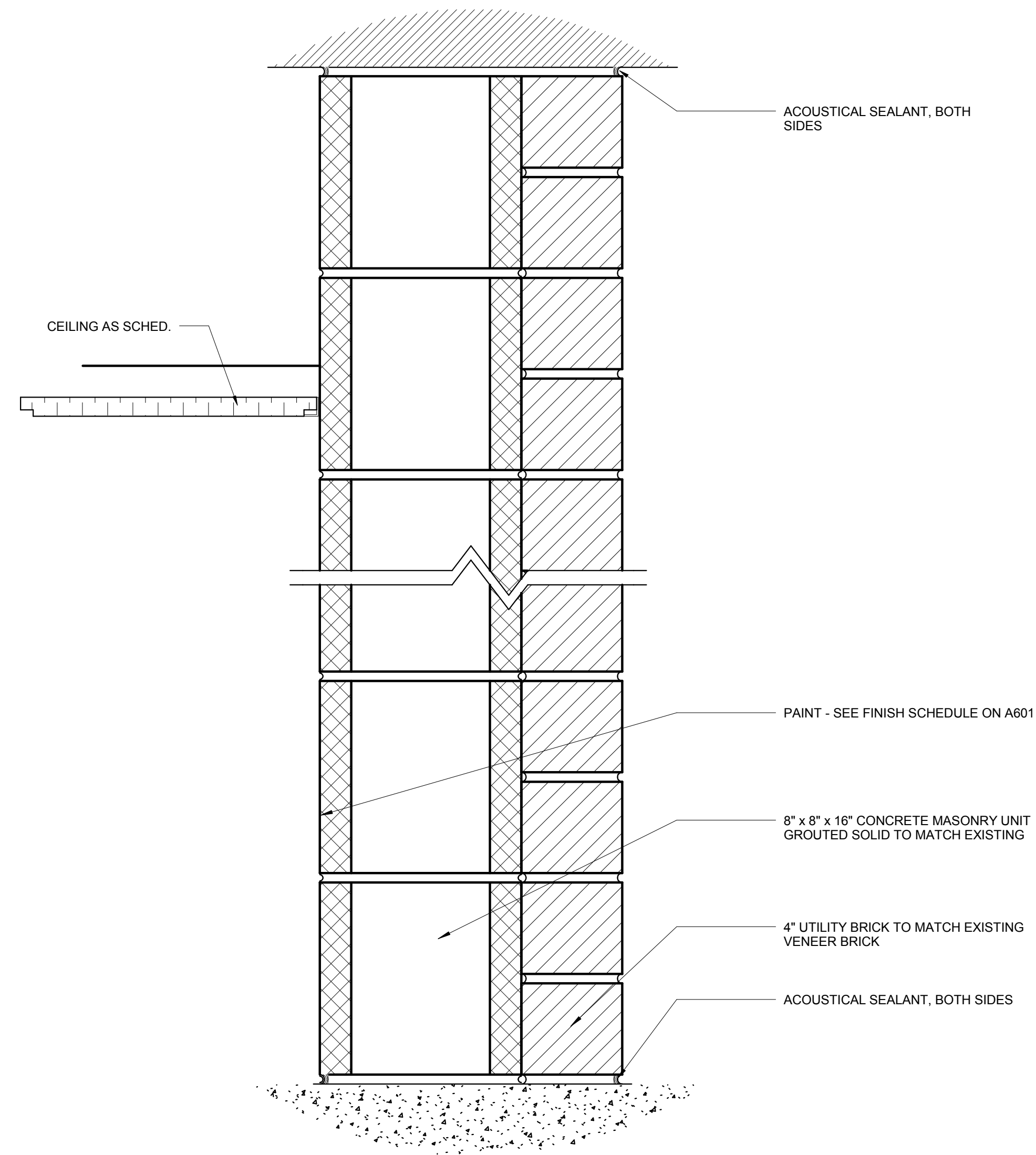
ARCHITECT
TAE Y. JUNG
STATE OF MARYLAND



1 WALL TYPE 1 FURRING WALL ON EXIST MASONRY DETAIL
3" = 1'-0"



2 WALL TYPE 2 GWB WALL DETAIL
3" = 1'-0"



3 WALL TYPE 3 NEW 12" MASONRY WALL/BRICK VENEER
3" = 1'-0"

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

WALL SCHEDULE

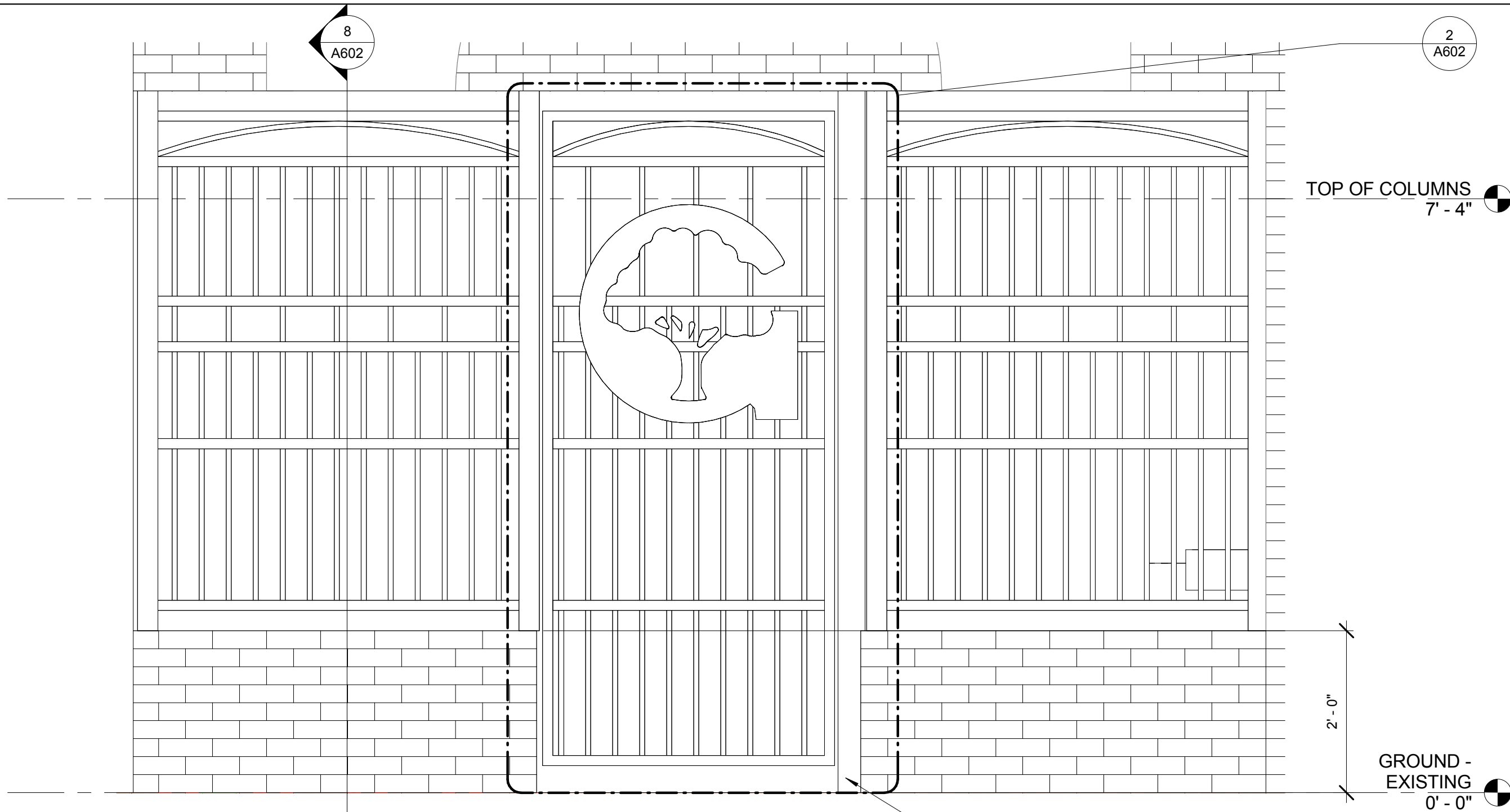
Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model 1:1

Drawn By ASM & PG	Checked By AV
Sheet Number A600	

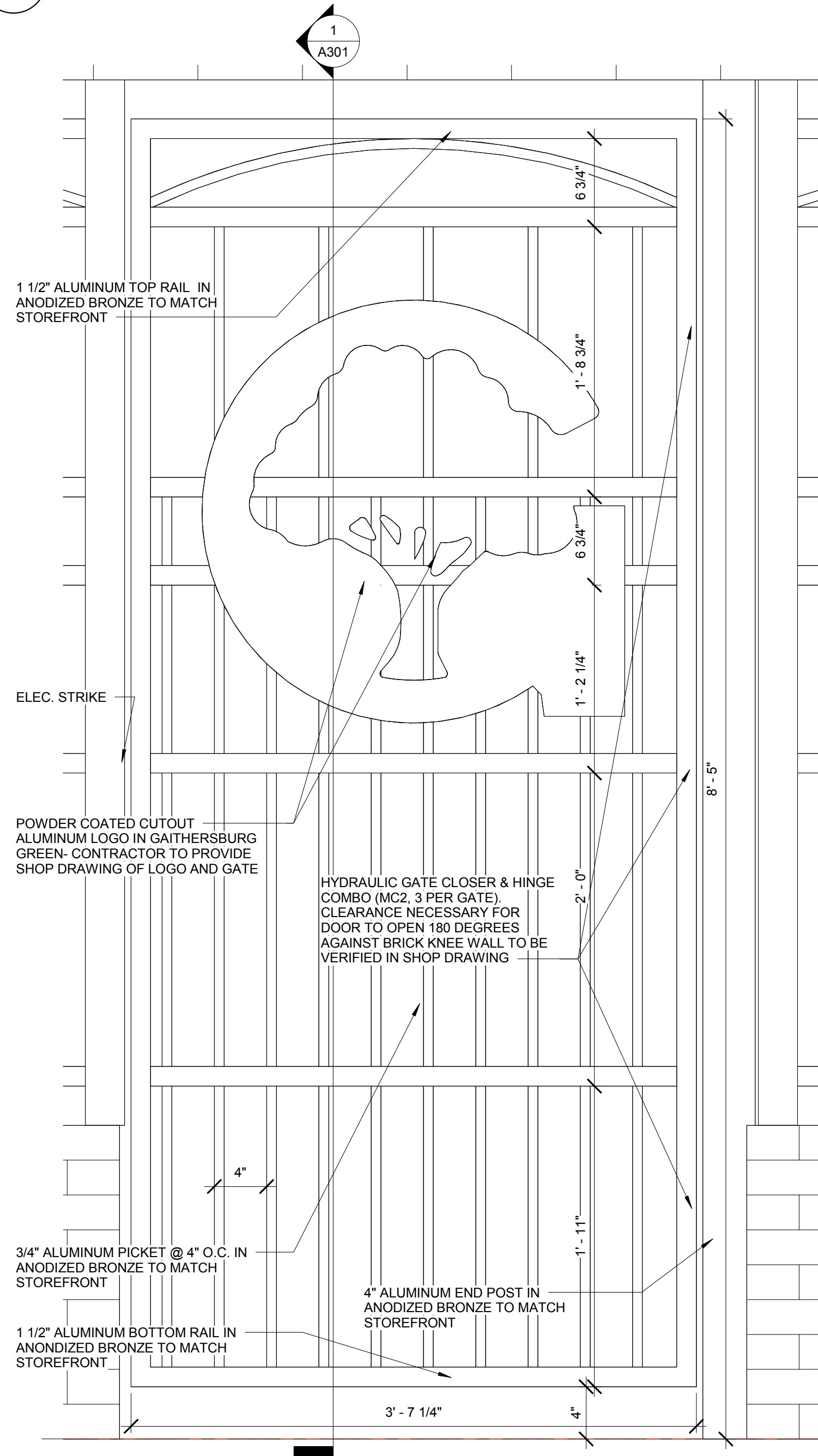


TAE Y. JUNG
STATE OF MARYLAND



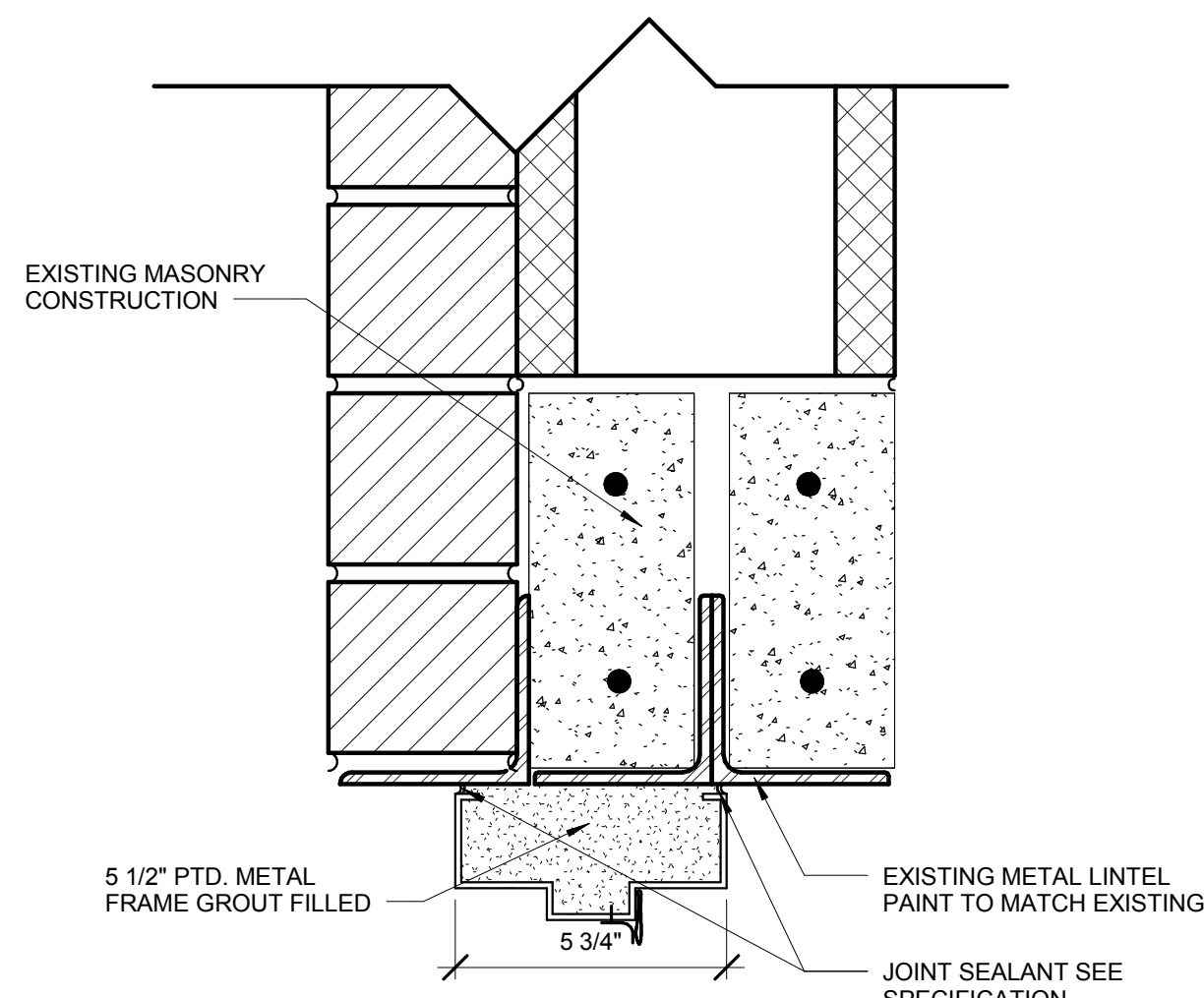
1
A602
3/4" = 1'-0"

DETAIL OF TYPICAL LOBBY ALUMINUM ENTRY GATE



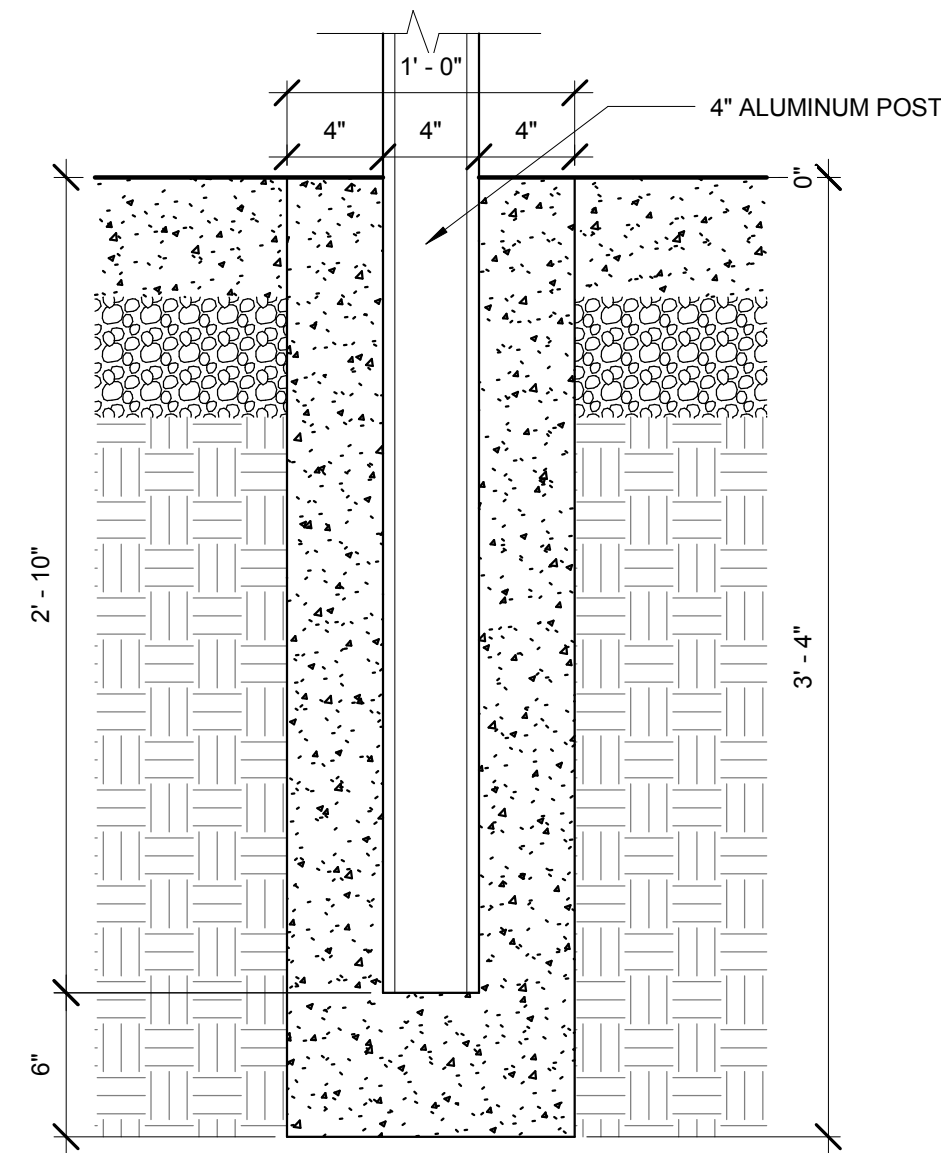
2
A602
1 1/2" = 1'-0"

DETAIL CALLOUT OF ALUMINUM GATE



5
A602
3" = 1'-0"

METAL DOOR FRAME HEAD DETAIL (MASONRY)

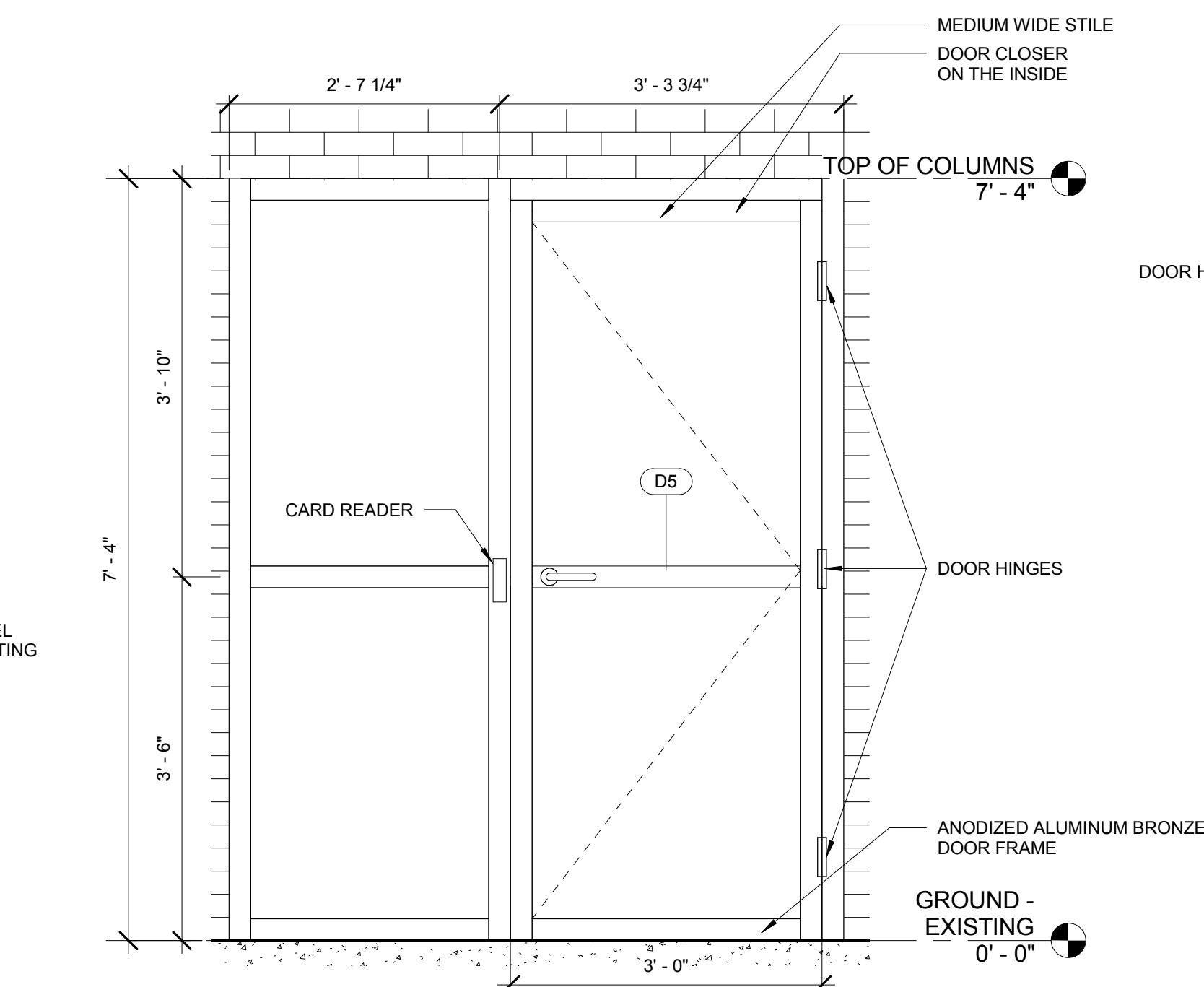


7
A602
1 1/2" = 1'-0"

ALUMINUM GATE FOOTING DETAIL

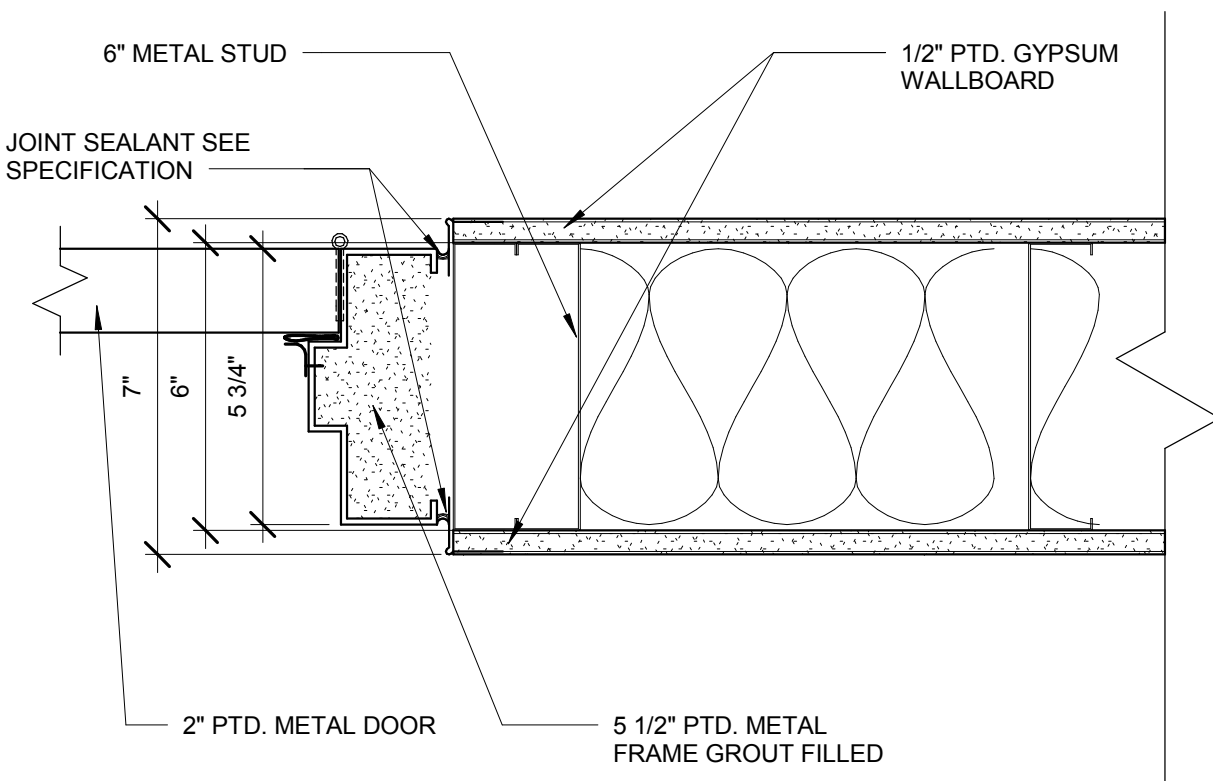
DOOR SCHEDULE											
Mark	Count	Height	Width	Thickness	Family	Frame Material	Finish		Function	Hardware Set	Phase Created
D1	1	7' - 0"	3' - 0"	0' - 2"	Single-Flush	Metal	Painted Bronze Finish		Interior	HW1	New Construction
D2	1	7' - 0"	3' - 0"	0' - 2"	Single-Flush	Metal	Painted Bronze Finish		Interior	HW2	New Construction
D3	1	7' - 0"	2' - 9"	0' - 2"	Single-Flush	Metal	Painted Bronze Finish		Interior	HW2	New Construction
D4	1	7' - 0"	3' - 0"	0' - 2"	Single-Flush	Metal	Painted Bronze Finish		Interior	HW4	New Construction
D5	1	6' - 8 1/2"	2' - 7"		Curtain Wall Sgl Glass	Aluminum	Painted Bronze Finish		Exterior	HW5	New Construction
D6	1	8' - 5"	3' - 7 1/4"		Gate	Aluminum	Powder Coated Bronze Finish		Ext. Gate	HW6	New Construction
D7	1	8' - 5"	3' - 7 1/4"		Gate	Aluminum	Powder Coated Bronze Finish		Ext. Gate	HW7	New Construction

LOCKSET DESCRIPTION																						
HW1						HW4						HW6										
MANUF.			MODEL			FINISH			MANUF.			MODEL			FINISH							
HINGE	H1	3	MCKINNEY	T4A3386	SATIN NICKEL	HINGE	H1	3	MCKINNEY	T4A3386	SATIN NICKEL	MECH CLOSER (2)	MC2	2	D & D TECHNOLOGIES	RF 108 S	BLACK					
ELECTRIC STRIKE	ES1	1	SDC	45-4S		KEYED HANDLE (I)	HA1	1	STANLEY	9K37D14CSTK619		GATE ELECTRIC STRIKE	GL1	1	SECURITRON	GL1						
KEYED HANDLE (O)	HA1	1	STANLEY	9K37D14CSTK619	SATIN NICKEL	NO HARDWARE (O)	HA1	1	STANLEY	EXIT TYPE PLATE	SATIN NICKEL	DOOR BELL (O)	DB1	1	EMTEK	PER USE						
CARD READER (O)	CR1	1	HID	6005	BLACK	MECH. CLOSER (I)	MC1	1	NORTON	8301	SATIN NICKEL	PUSH BUTTON (IN OFFICE)		1								
MECH. CLOSER (I)	MC1	1	NORTON	8301	SATIN NICKEL	SILENCER	S1	3	IVES	SR64	TAN	JUNCTION BOX		1								
SILENCER	S1	3	IVES	SR64	TAN	WEATHERSTRIP		1														
WEATHERSTRIP		1				TRANSITION		1														
TRANSITION		1				HW5						HW7										
UNDERCUT						MANUF.			MODEL			FINISH			MANUF.			MODEL			FINISH	
HW2						MANUF.			MODEL			FINISH			MANUF.			MODEL			FINISH	
HINGE (3)	H1	3	MCKINNEY	T4A3386	SATIN NICKEL	HINGE (3)	H1	3	MCKINNEY	T4A3386	SATIN NICKEL	MECH. CLOSER (2)	MC2	2	D & D TECHNOLOGIES	RF 108 S	BLACK					
PRIVACY HANDLE (PUSH LOCK INSIDE, SLOT UNLOCK OUTSIDE)	HA1	1	STANLEY	9K37L14CSTK619	SATIN NICKEL	ELECTRIC STRIKE	ES1	1	SDC	45-4S		DEADBOLT (O)	DE1	1	SCHLAGE	B62	SATIN NICKEL					
SILENCER	S1	3	IVES	SR64	TAN	KEYED HANDLE (I & O)	HA1	1	STANLEY	9K37D14CSTK619	SATIN NICKEL	KEY: I=INSIDE O=OUTSIDE										
WEATHERSTRIP		1			CARD READER (O)	CR1	1	HID	6005	BLACK												
TRANSITION		1			MECH. CLOSER (I)	MC1	1	NORTON	8301	SATIN NICKEL												
UNDERCUT					SILENCER	S1	3	IVES	SR64	TAN												
						WEATHERSTRIP		1														
						TRANSITION		1														



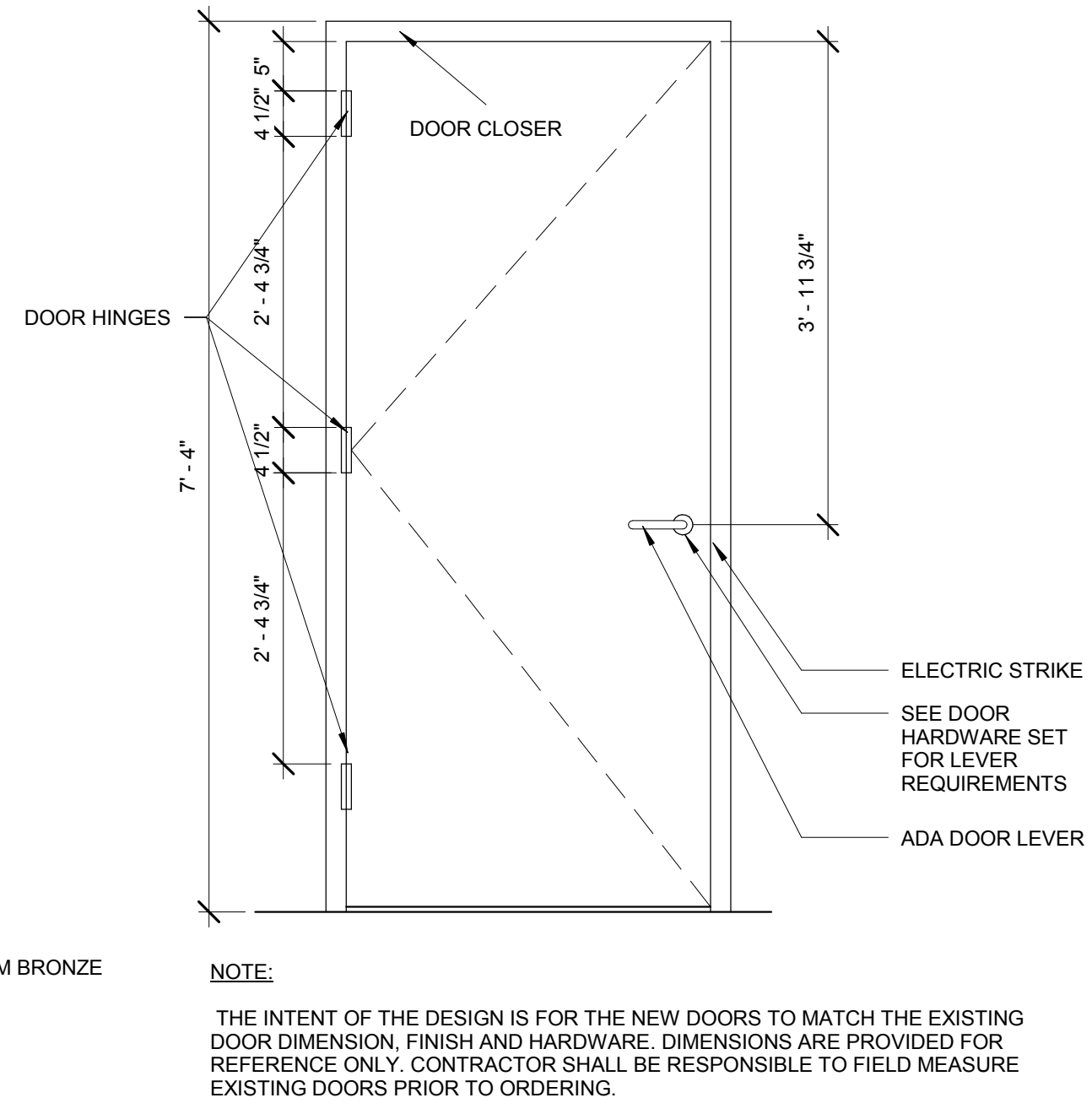
8
A602 A103
3/4" = 1'-0"

GLASS DOOR DETAILS



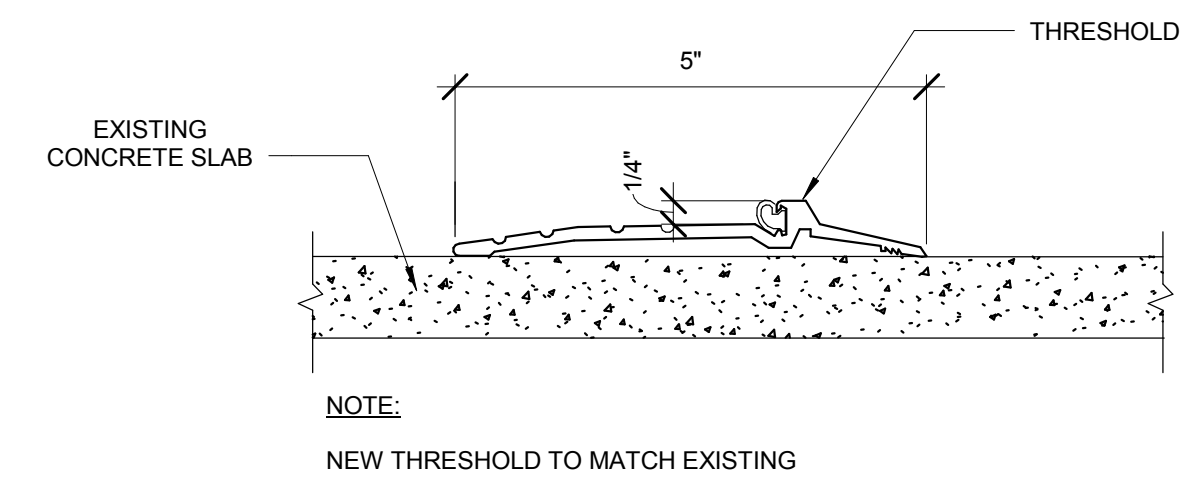
4
A602
3" = 1'-0"

TYPICAL DOOR FRAME JAMB



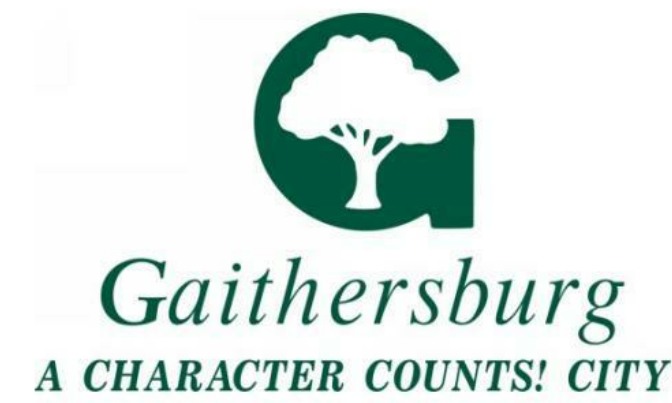
3
A602
3/4" = 1'-0"

TYPICAL DOOR DETAIL



6
A602
6" = 1'-0"

TYPICAL THRESHOLD DETAIL



MINIATURE GOLF PARK OFFICE BUILDING RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15975, expiration date 10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

DOOR SCHEDULE & DETAILS

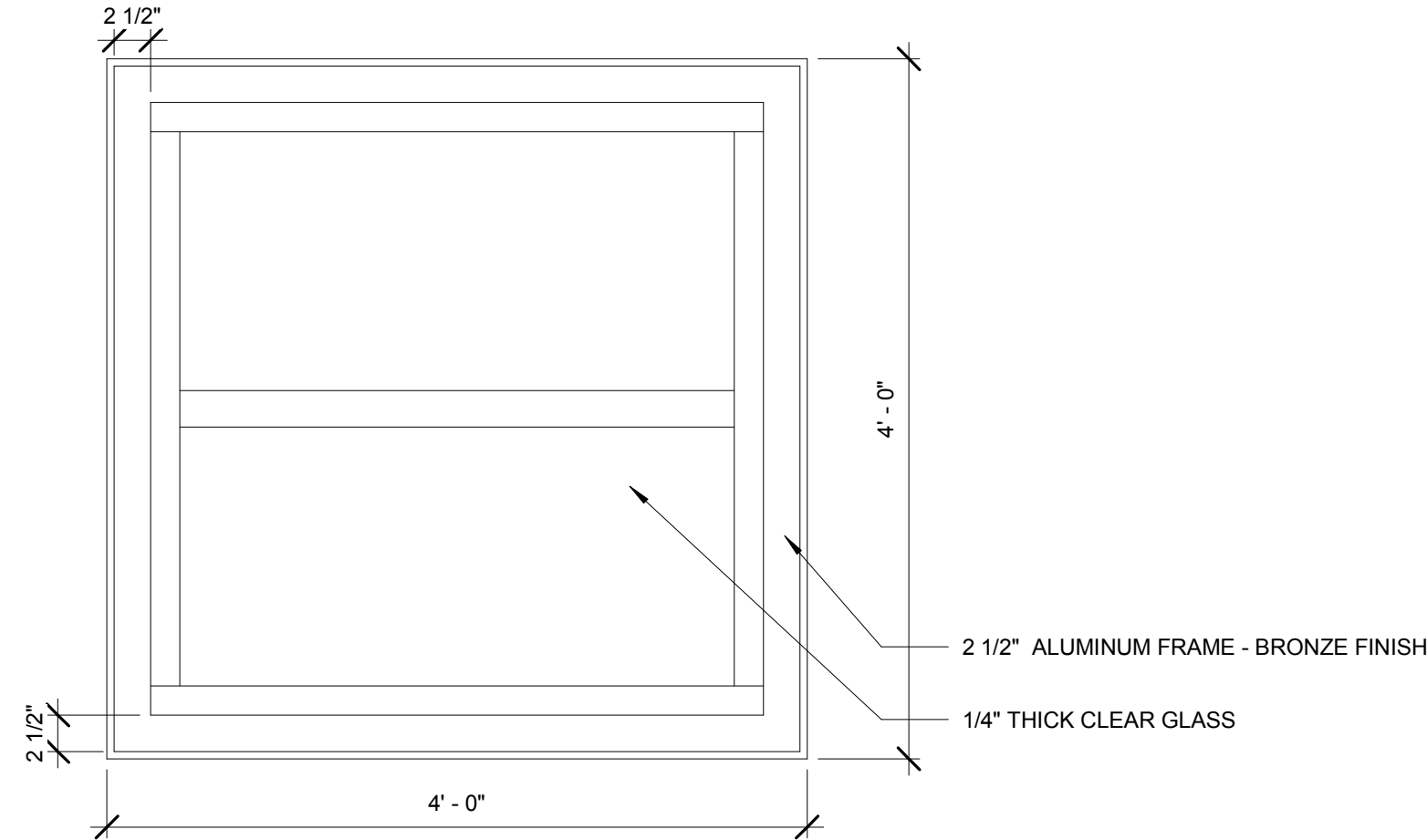
Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number: 12-0009.012
Date: 06.30.2016
Drawing Scale: AS NOTED
CADD Filename: Revit Model
CADD Plot Scale: 1:1

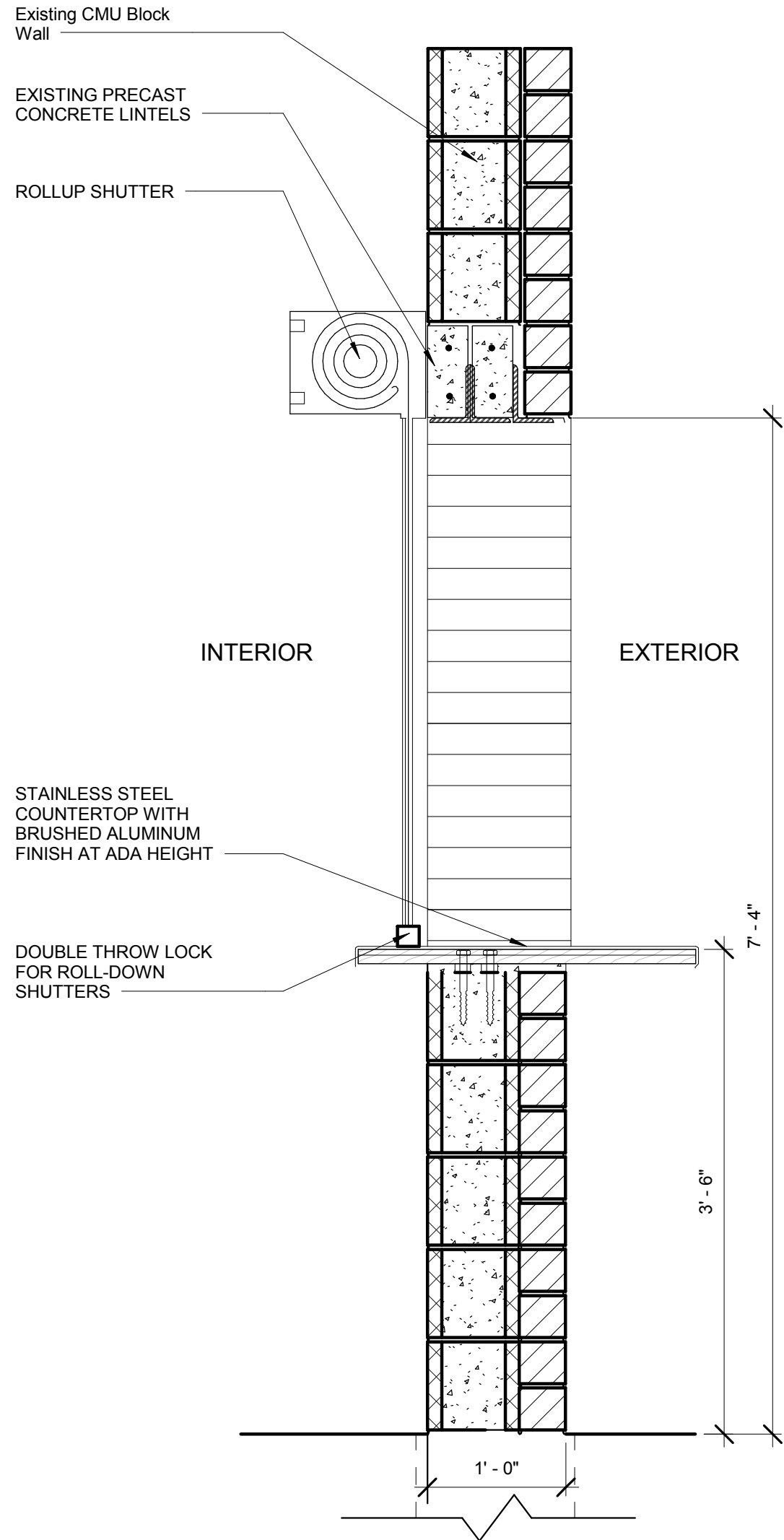
Drawn By: ASM
Checked By: AV

Sheet Number
A602

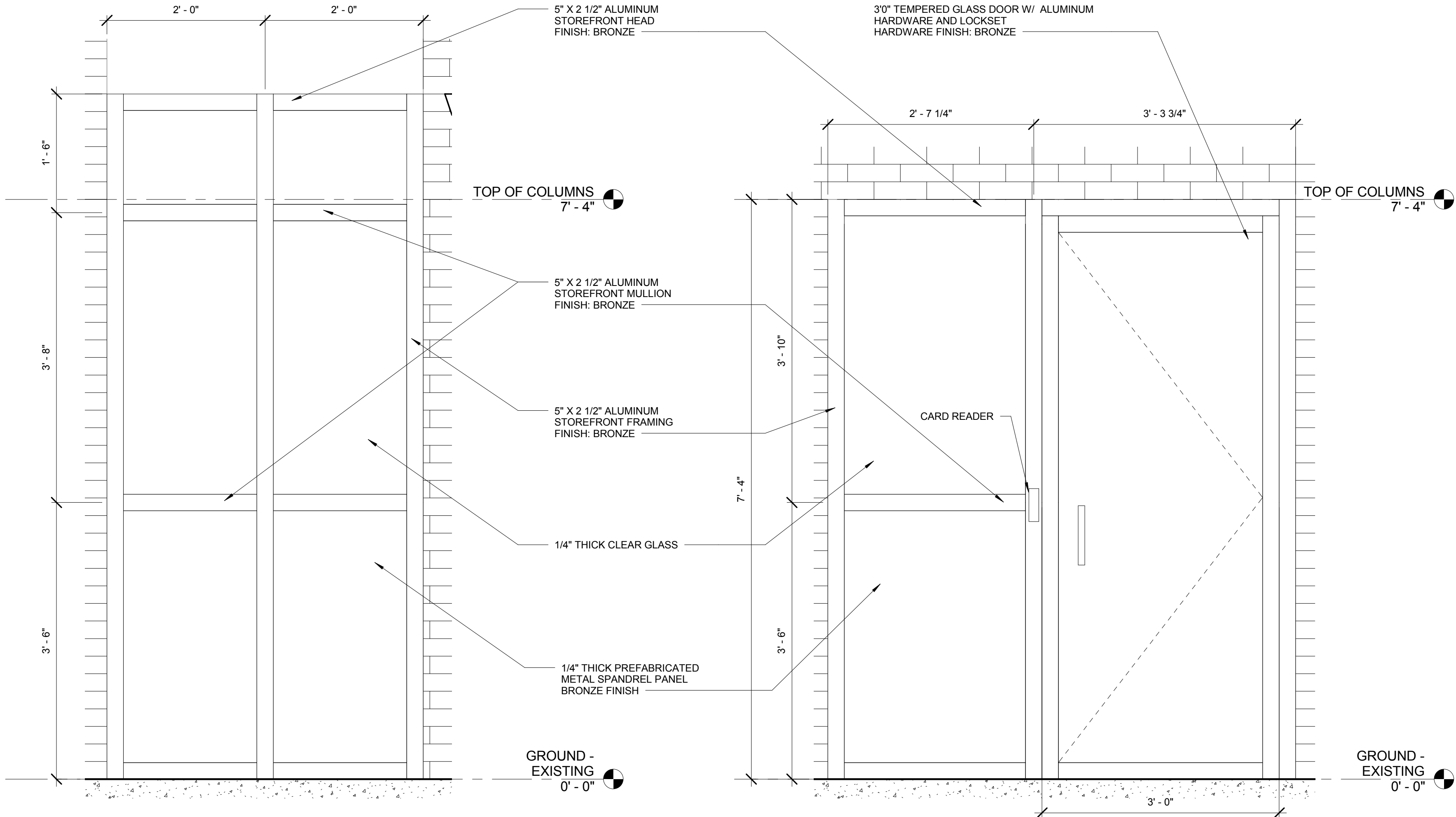
WINDOW SCHEDULE					
Mark	Height	Width	Type	Phase Created	Description
W1	4' - 0"	3' - 11 1/2"	48"x48"	New Construction	TRIM FINISH: BRONZE



3
A603
DOUBLE-HUNG WINDOW DETAIL
1" = 1'-0"

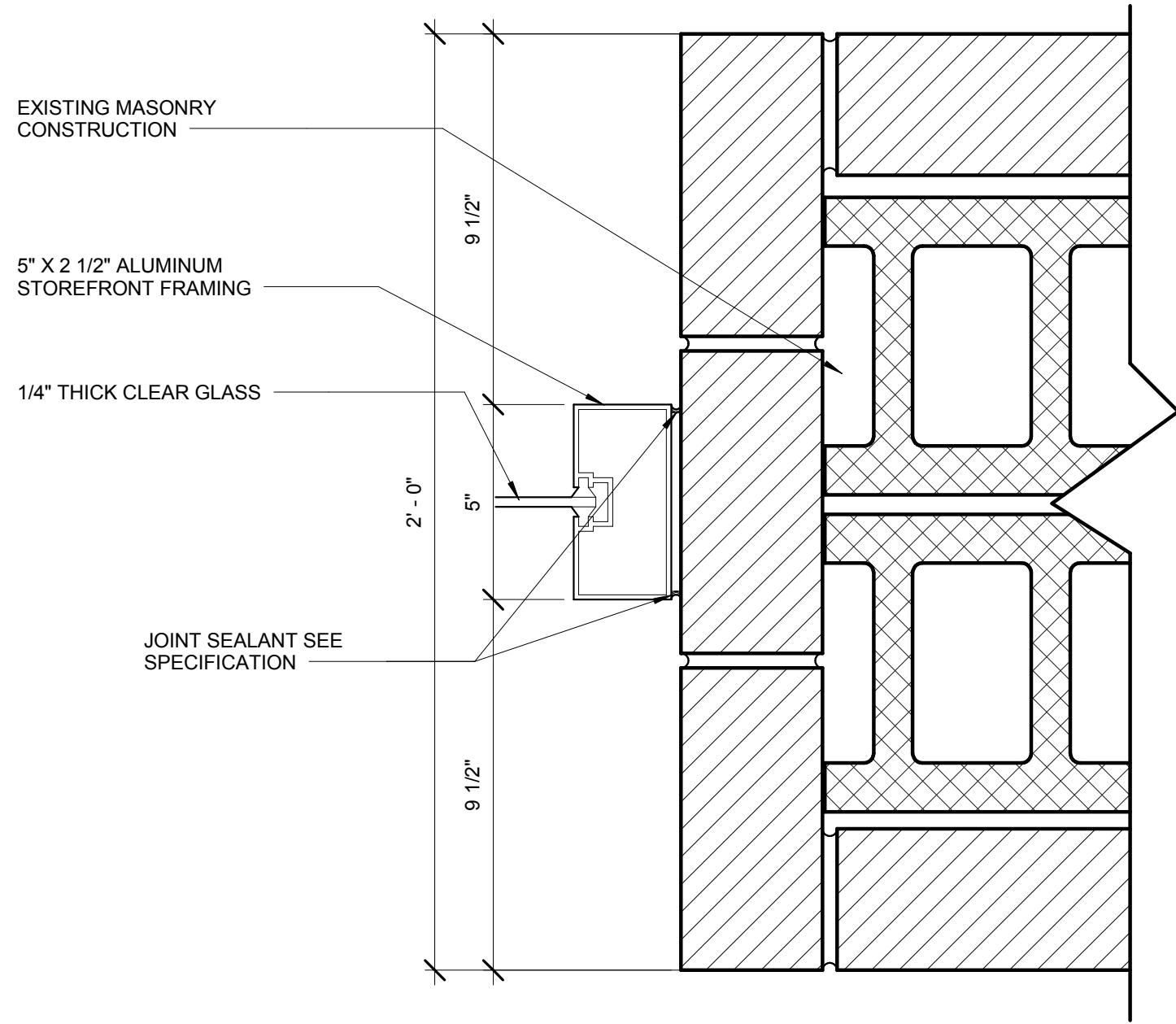


2
A603
TYPICAL ROLLUP SHUTTER SECTION DETAIL
1" = 1'-0"

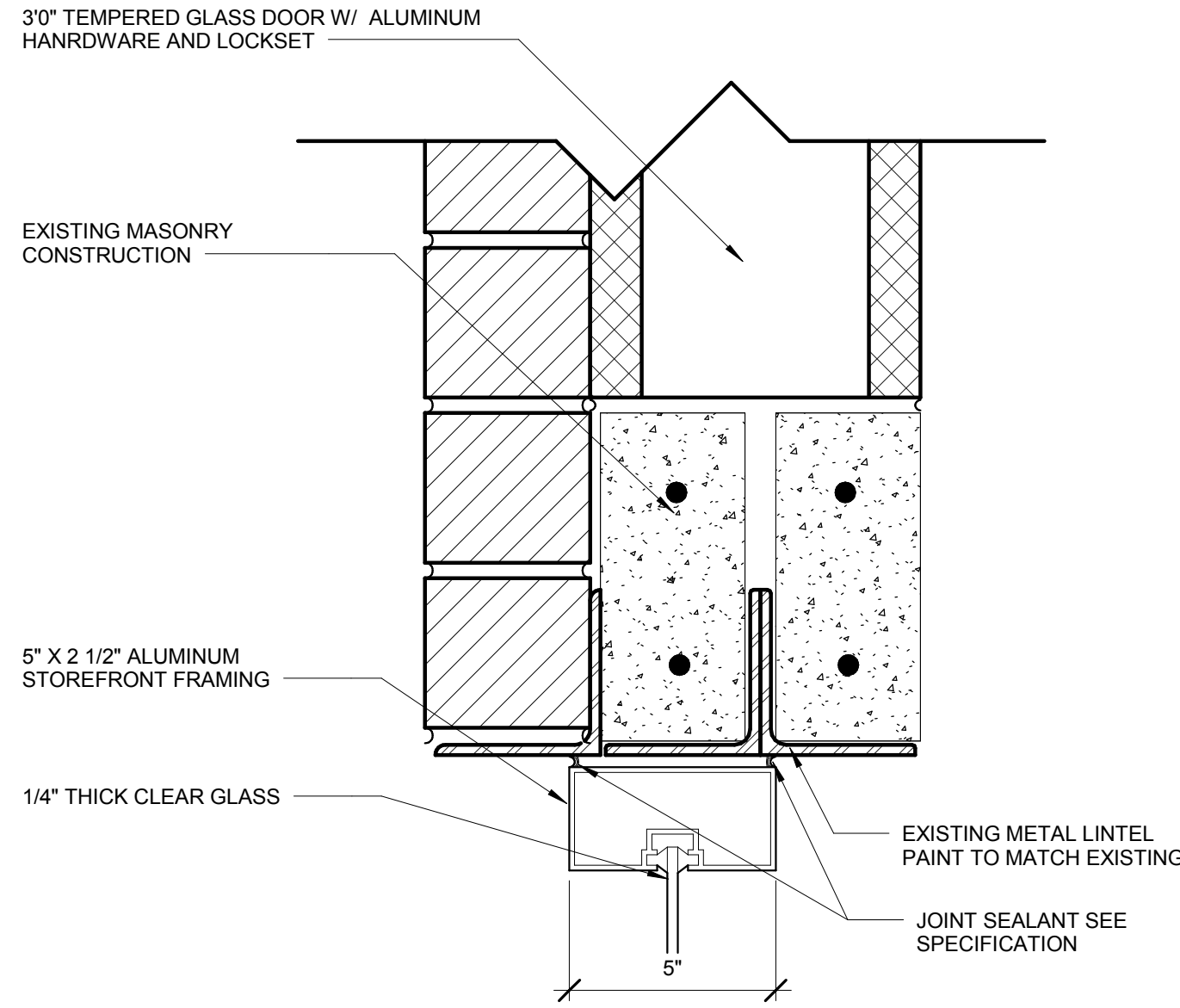


1
A603
TYPICAL CURTAIN WALL ELEVATION
1" = 1'-0"

6
A603
TYPICAL CURTAIN WALL WITH DOOR ELEVATION
1" = 1'-0"



5
A603
TYPICAL CURTAIN WALL JAMB DETAIL
3" = 1'-0"



4
A603
TYPICAL CURTAIN WALL HEAD DETAIL
3" = 1'-0"



Gaithersburg
A CHARACTER COUNTS! CITY

MINIATURE GOLF PARK OFFICE BUILDING RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

WINDOW SCHEDULE & DETAILS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

A/E Project Number 12-0009.012 Drawing Scale: AS NOTED

Date 06.30.2016 CADD Filename Revit Model CADD Plot Scale 1:1

Drawn By Author

Checked By Checker

Sheet Number

A603

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

**BATHROOM FIXTURE
SCHEDULE**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number
12-0009.012

Drawing Scale: AS NOTED

Date
06.30.2016

CADD Filename
Revit Model

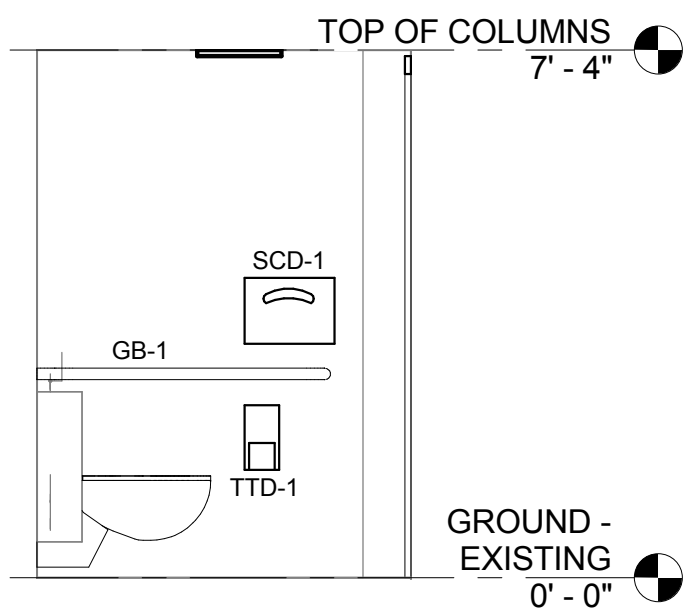
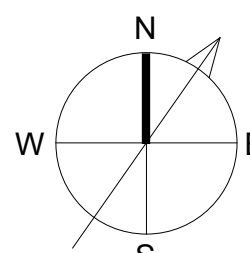
CADD Plot Scale
1:1

Drawn By
Author

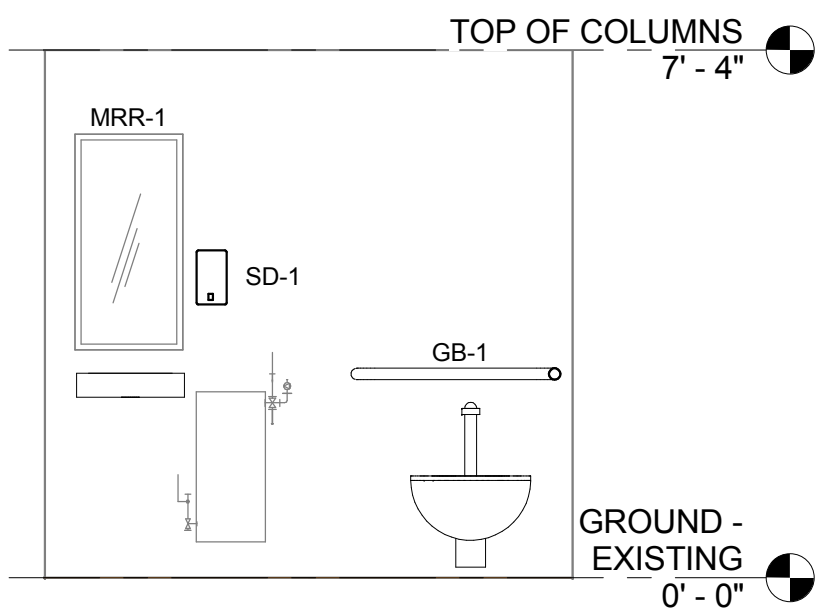
Checked By
Checker

Sheet Number

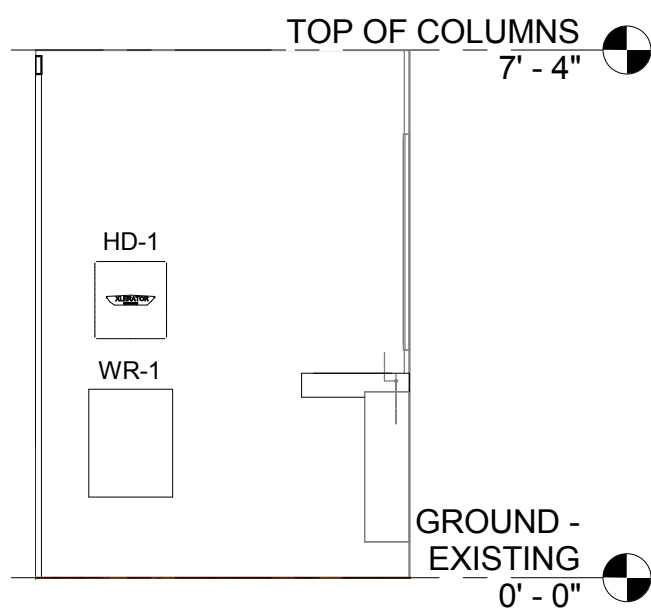
A604



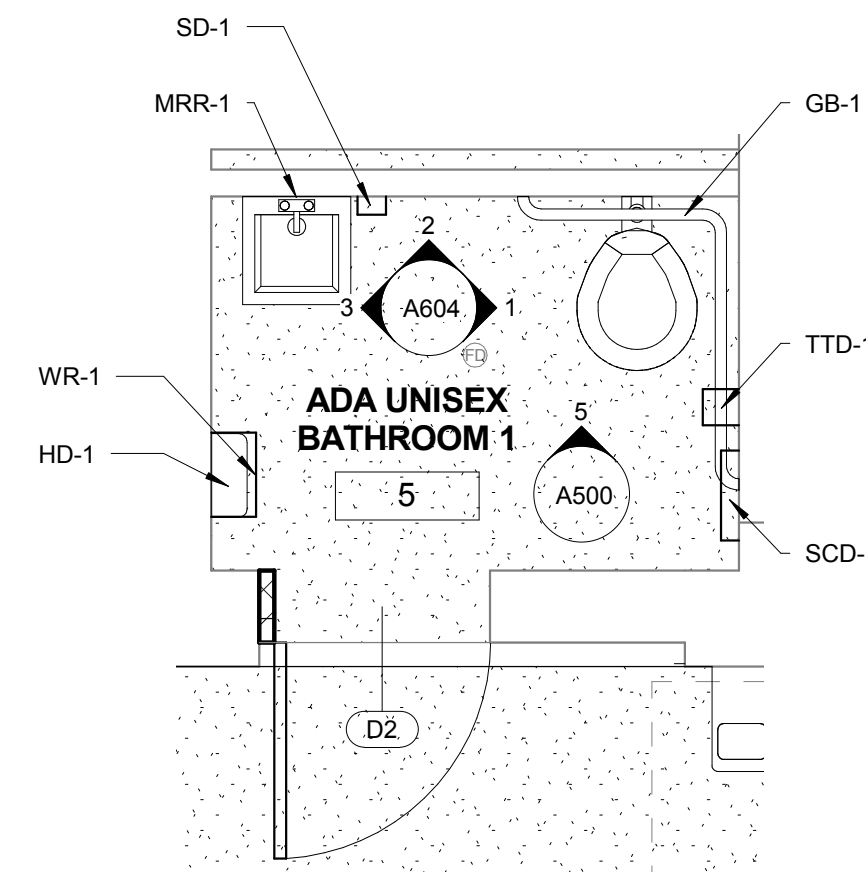
1 BATHROOM 1 EAST ELEVATION
A604 3/8" = 1'-0"



2 BATHROOM 1 NORTH ELEVATION
A604 3/8" = 1'-0"



3 BATHROOM 1 WEST ELEVATION
A604 3/8" = 1'-0"

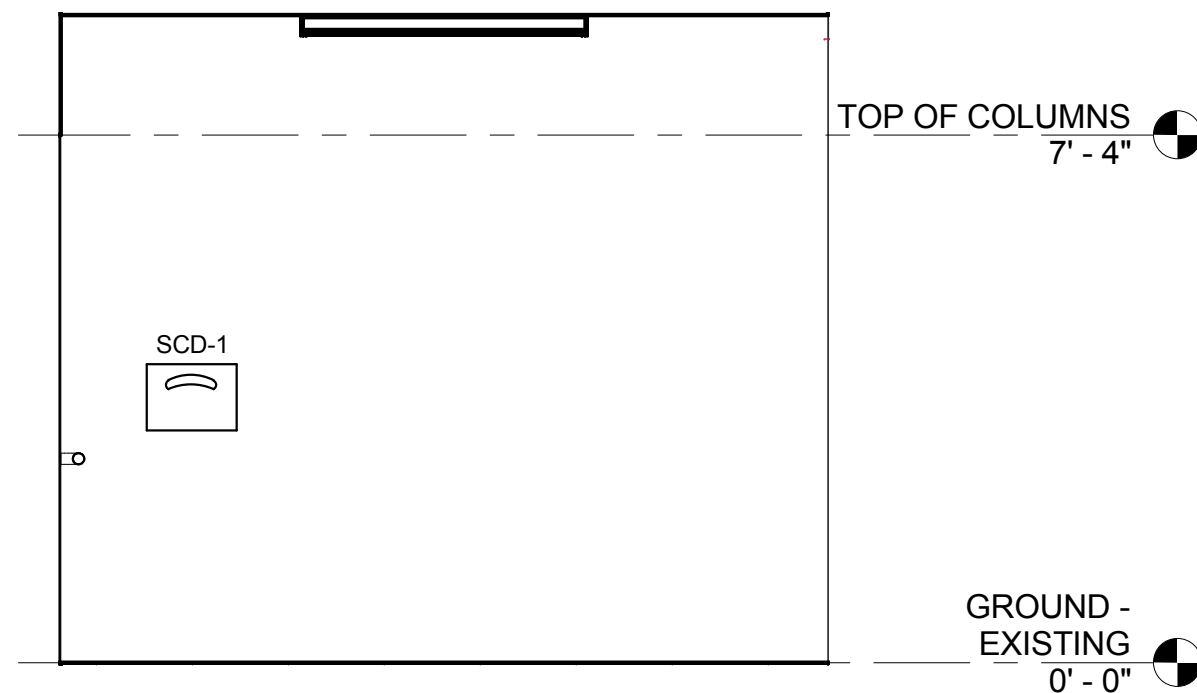


7 BATHROOM 1 PLAN - PROPOSED
A604 A200 3/8" = 1'-0"

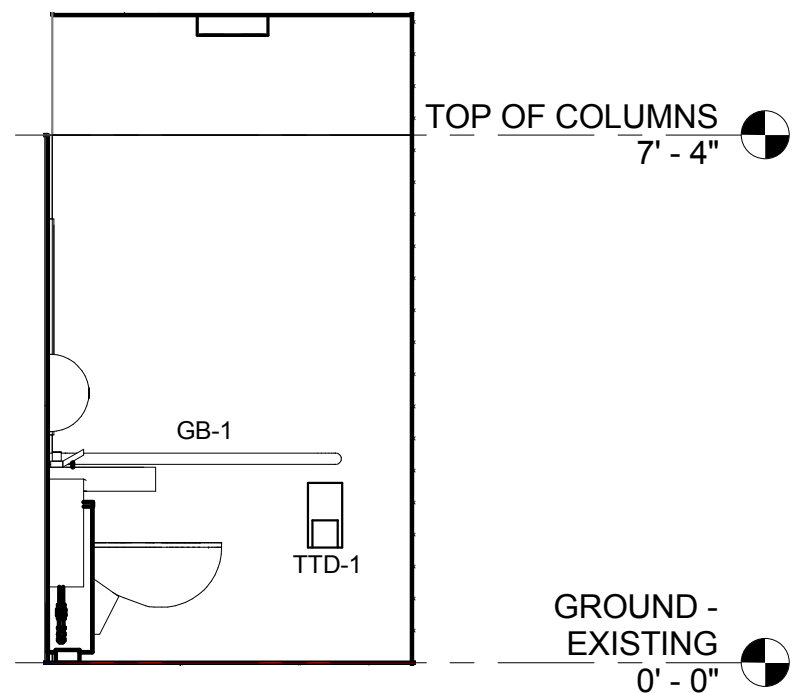
FINISH LEGEND

KEY	DESCRIPTION	MANUFACTURER	COMMENTS
GB-1	GRAB BAR		MOUNT PER ADA REQUIREMENTS
MRR-1	MIRROR		SEE SPEC. FOR TYPE
SCD-1	SEAT COVER DISPENSER	BRADLEY	SEE PRODUCT DATA
SD-1	SOAP DISPENSER	BRADLEY	SEE PRODUCT DATA
WR-1	WASTE RECEPTACLE - SURFACE MOUNTED	BRADLEY	SEE PRODUCT DATA
TTD-1	TOILET TISSUE DISPENSER	BRADLEY	SEE PRODUCT DATA
HD-1	ELECTRIC HAND DRYER	EXCEL	SEE PRODUCT DATA

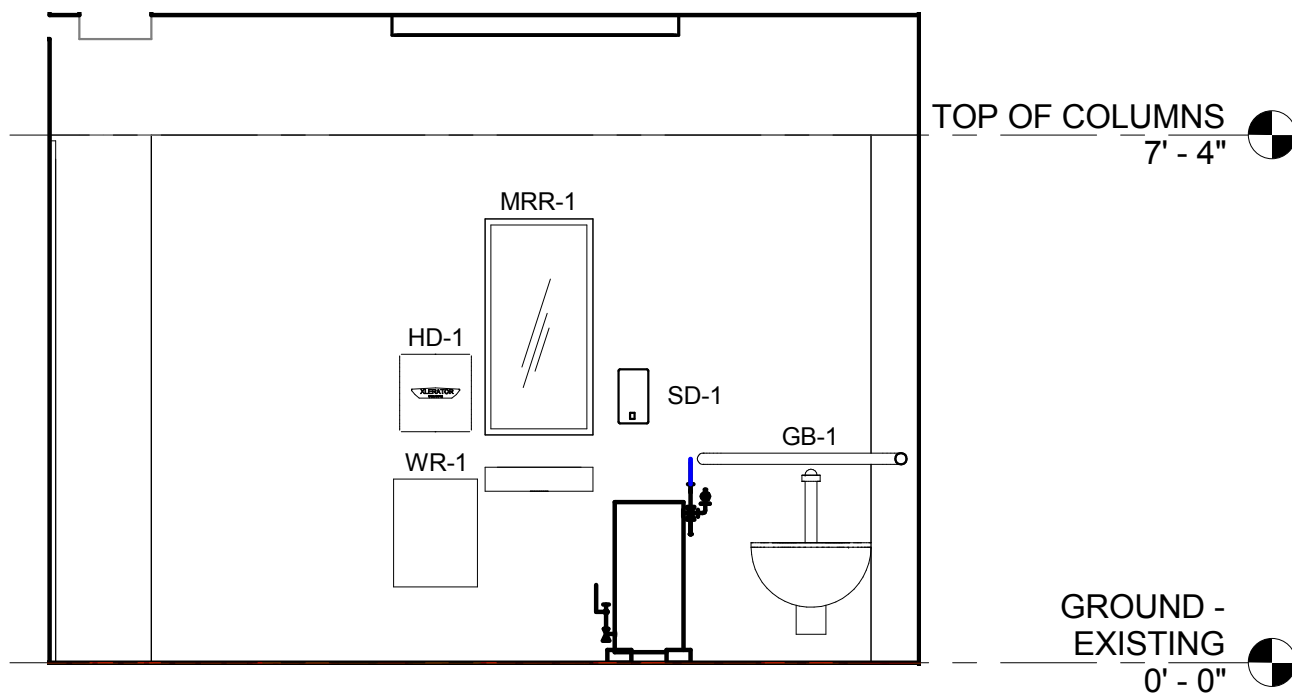
NOTES:
1. ALL BATHROOM FIXTURES TO BE MOUNTED IN ACCORDANCE WITH ADA REQUIREMENTS.



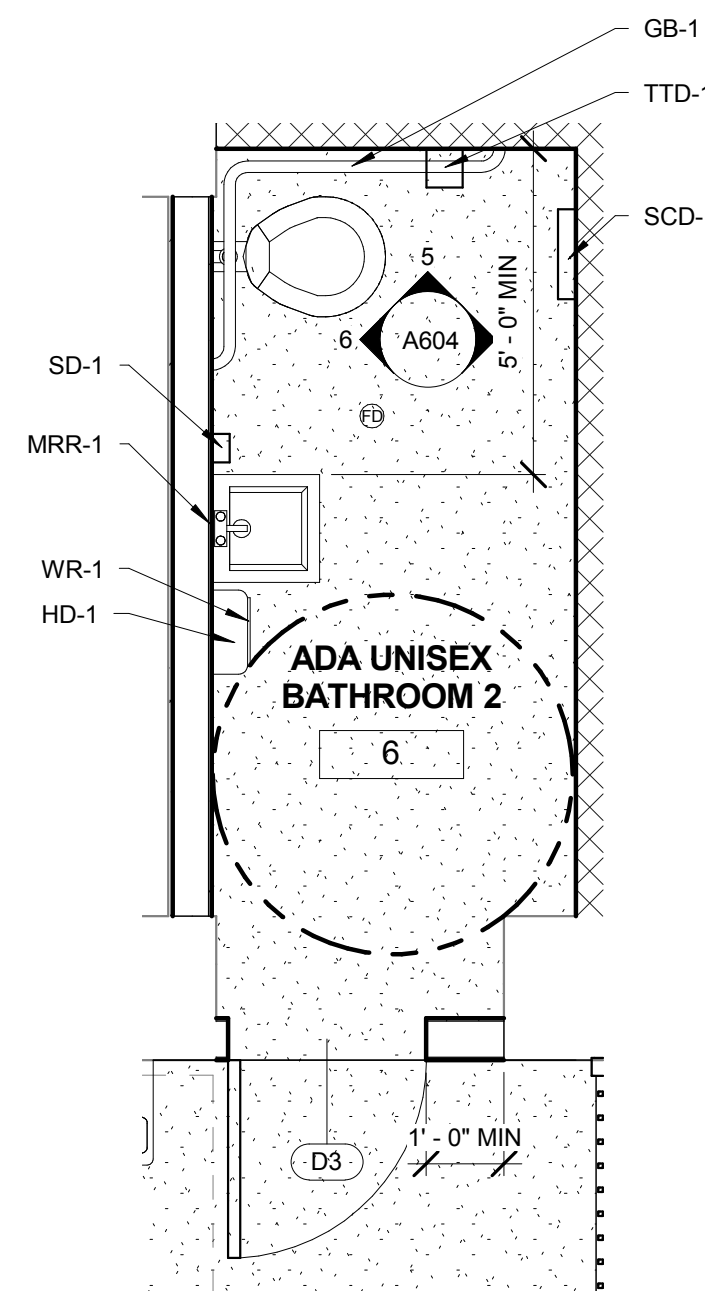
4 BATHROOM 2 EAST ELEVATION
A604 3/8" = 1'-0"



5 BATHROOM 2 NORTH ELEVATION
A604 3/8" = 1'-0"



6 BATHROOM 2 WEST ELEVATION
A604 3/8" = 1'-0"



8 Copy of BATHROOM 2 PLAN - PROPOSED
A604 A200 3/8" = 1'-0"

GENERAL NOTES

1. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERATE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
2. DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL EXISTING COMPONENTS. COORDINATE INSTALLATION OF NEW EQUIPMENT AND ACCESSORIES WITH EXISTING CONDITIONS. MINOR MODIFICATIONS TO EXISTING COMPONENTS, AT NO ADDITIONAL COST TO THE GOVERNMENT, MAY BE REQUIRED AS TO PROVIDE A COMPLETE AND CODE COMPLIANT SYSTEM.
3. THE GENERAL CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL EXISTING TO REMAIN AND NEW EQUIPMENT, DUCTWORK, HVAC PIPING, PLUMBING PIPING, SPRINKLER PIPING, ELECTRICAL CONDUITS, CABLE TRAYS ETC. WITH RESPECTIVE TRADES PRIOR TO DEVELOPING COORDINATION DRAWINGS AND SUBMITTING THEM FOR GOVERNMENT REVIEW AND APPROVAL. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BEGIN FABRICATION AND/OR INSTALLATION OF ANY EQUIPMENT/ DUCTWORK/ PIPING/ ELECTRICAL/ SPRINKLER/ CABLE TRAYS PRIOR TO RECEIVING APPROVED COORDINATION DRAWINGS FROM GOVERNMENT.
4. INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS, CONTRACT DOCUMENTS AND APPLICABLE CODES AND REGULATIONS.
5. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER DRAWINGS.
6. LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULT MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS.
7. LOCATIONS AND SIZES OF ALL FLOOR, AND WALL OPENINGS SHALL BE COORDINATED WITH ALL OTHER TRADES INVOLVED.
8. ALL OPENINGS IN FIRE WALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC SHALL BE FIRE STOPPED/BLOCKED WITH AN APPROVED PRODUCT.
9. PROVIDE LAMINATED SHEET IN BINDERS FOR EACH EQUIPMENT SYSTEM CONTROL DIAGRAM AND SEQUENCE OF OPERATION FOR USE BY FACILITY MAINTENANCE STAFF.
10. MOUNT ALL OVERHEAD UTILITIES AND OTHER FIXTURES WEIGHING 31 POUNDS OR MORE (EXCLUDING DISTRIBUTED SYSTEMS SUCH AS PIPING NETWORKS THAT COLLECTIVELY EXCEED THAT WEIGHT) TO MINIMIZE THE LIKELIHOOD THAT THEY WILL FALL AND INJURE BUILDING OCCUPANTS. DESIGN ALL EQUIPMENT MOUNTINGS TO RESIST FORCES OF 0.5 TIMES THE EQUIPMENT WEIGHT IN ANY HORIZONTAL DIRECTION AND 1.5 TIMES THE EQUIPMENT WEIGHT IN THE DOWNWARD DIRECTION. THIS STANDARD DOES NOT PRECLUDE THE NEED TO DESIGN EQUIPMENT MOUNTINGS FOR FORCES REQUIRED BY OTHER CRITERIA SUCH AS SEISMIC STANDARDS.
11. LOCATE ALL MECHANICAL EQUIPMENT FOR UNOBSTRUCTED ACCESS TO UNIT ACCESS PANELS AND CONTROLS.
12. ANY WORK TO EQUIPMENT, IT'S ACCESSORIES OR SUPPORTING COMPONENTS UNDER WARRANTY SHALL BE PROVIDED ONLY BY A CONTRACTOR OR VENDOR THAT WILL MAINTAIN THE VALIDITY OF THE WARRANTY.
13. SIZES AND LOCATIONS OF ALL EXISTING EQUIPMENT, DUCTWORK, PIPING, CONTROLS, SUPPORTS, ELECTRICAL AND APPURTENANCES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID AND START OF WORK. CONTRACTOR SHALL COORDINATE ALL RELATED EFFORTS WITH THE OWNER.
14. REPAIR/REAPPLY EXISTING INSULATION THAT BECOMES DAMAGED OR REMOVED DURING CONSTRUCTION.
15. ALL DUCTWORK, HVAC UNITS, DIFFUSERS, GRILLES, PIPING, VALVES, ETC., OUTSIDE OF THE LIMIT OF WORK AREA REPRESENT EXISTING TO REMAIN ITEMS THAT ARE NOT PART OF THIS CONTRACT. ITEMS ARE INDICATED FOR REFERENCE ONLY UNLESS NOTED OTHERWISE.
16. CONTRACTOR SHALL COORDINATE PHASING OF UTILITIES TO MINIMIZE IMPACT ON SERVICES / FACILITIES TO REMAIN IN OPERATION DURING CONSTRUCTION.

MECHANICAL SPECIFICATIONS

1. GENERAL

- 1.1 ALL WORK SHALL CONFORM TO ALL LOCAL AND STATE CODES, RULES AND REGULATIONS.
- 1.2 CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES AND TAXESCONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES AND TAXES.
- 1.3 MAKE NO CHANGES WITHOUT THE WRITTEN PERMISSION FROM THE ARCHITECT.
- 1.4 ALL MATERIAL AND EQUIPMENT INDICATED ON THE PLANS AND DESCRIBED IN THE SPECIFICATIONS SHALL BE PROVIDED BY THE CONTRACTOR NEW AND THE BEST PRODUCTS OF REPUTABLE MANUFACTURERS AND SHALL BE IN NEW CONDITION AT ACCEPTANCE OF WORK.
- 1.5 THIS CONTRACTOR SHALL GUARANTEE ALL MATERIALS, LABOR AND EQUIPMENT FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE. CONTRACTOR SHALL PAY FOR ANY REPAIRS OR REPLACEMENTS CAUSED BY DEFECTIVE WORKMANSHIP OR FAULTY MATERIALS AS CONSTRUED HEREIN WITHIN THE PERIOD COVERED BY THE GUARANTEE.
- 1.6 SCAFFOLDING, RIGGING AND HOISTING: UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING, AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES OF ANY EQUIPMENT AND APPARATUS FURNISHED, AND REMOVAL OF SAME FROM PREMISES WHEN NO LONGER REQUIRED.
- 1.7 CONTRACTOR SHALL MAKE AN ON-SITE INSPECTION TO DETERMINE FULLY THE EXISTING CONDITIONS AND THE EXTENT OF DEMOLITION.
- 1.8 CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF EXISTING DUCTWORK AND PIPING BEFORE PURCHASING NEW MATERIALS AND EQUIPMENT OR FABRICATING NEW DUCTWORK.
- 1.9 LOCATION OF EQUIPMENT AND OTHER MECHANICAL WORK IS INDICATED DIAGRAMMATICALLY BY THE DRAWINGS. DETERMINE EXACT LOCATIONS ON THE JOB SITE, SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF OTHER CONTRACTORS.
- 1.10 CONTRACTOR ASSUMES RESPONSIBILITY FOR PROPER ARRANGEMENT OF PIPES, DUCTS, ETC., TO CONNECT APPROVED EQUIPMENT IN A PROPER AND APPROVED MANNER. FOLLOW EQUIPMENT MANUFACTURER'S DETAILED INSTRUCTIONS AND THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT BEFORE PROCEEDING. NO EQUIPMENT INSTALLATION OR CONNECTIONS SHALL BE MADE IN A MANNER THAT VOIDS THE MANUFACTURER'S WARRANTY.
- 1.11 SEE ARCHITECTURAL DRAWINGS FOR SUPPORT DETAILS OF ALL ROOF MOUNTED EQUIPMENT AND FOR THE LOCATION OF ROOF PENETRATIONS.
- 1.12 UNLESS OTHERWISE NOTED, ALL SPECIFIED EQUIPMENT IS LESS THAN 200 POUNDS. SEE ARCHITECTAL DRAWINGS FOR SUPPORT DETAILS OF ALL EQUIPMENT GREATER THAN 200 LBS.
- 1.13 INSTALL EACH ITEM OF EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- 1.15 INSTALL ALL WORK IN A NEAT AND WORKMANLIKE MANNER, USING ONLY WORKMEN THOROUGHLY QUALIFIED IN THE TRADE OF DUTIES THEY ARE TO PERFORM. ROUGH WORK WILL BE REJECTED.
- 1.16 CUTTING AND PATCHING SHALL BE DONE BY THE APPROPRIATE TRADE UNLESS OTHERWISE REQUIRED BY TRADE CUSTOM OR SPECIFIED UNDER ANOTHER SECTION OF THE SPECIFICATIONS. CONTRACTOR SHALL FURNISH SKETCHES SHOWING THE LOCATIONS AND SIZES OF ALL OPENINGS, CHASES, ETC. REQUIRED. CONTRACTOR IS LIABLE FOR CUTTING OR PATCHING MADE NECESSARY BY HIS FAILURE TO MAKE PROPER ARRANGEMENTS IN THIS RESPECT.
- 1.17 DO NOT CUT STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT AND ALL SUCH CUTTING SHALL BE DONE IN A MANNER AS DIRECTED BY THEM.
- 1.18 MAINTAIN WORK AREA CLEAN AT ALL TIMES DURING CONSTRUCTION. AFTER COMPLETING INSTALLATIONS OF DUCTWORK, CONTRACTOR SHALL CLEAN ENTIRE SYSTEM OF RUBBISH, PLASTER, DIRT AND ANY OTHER DEBRIS.
- 1.19 TEST ALL SYSTEMS. SYSTEMS SHALL OPERATE SATISFACTORILY AS DESIGNED AND INTENDED. REPORT ANY DEFICIENCIES TO [ARCHITECT][ENGINEER].
- 1.20 ANY AND ALL MATERIALS AND INSTALLATION METHODS USED IN THE MODIFICATION OF THE EXISTING ROOF SYSTEM SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE ROOF WARRANTY.

2. DEMOLITION

- 2.1 ALL EXISTING EQUIPMENT, OTHER THAN DUCTWORK, WIRING AND AIR DEVICES, REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE OWNER AND SHALL BE REMOVED, STORED, OR DISPOSED OF BY THE CONTRACTOR AT THE DIRECTION OF THE OWNER.
- 2.2 ALL OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING FROM DUCT DEMOLITION SHALL BE CLOSED AND FINISHED TO MATCH THE SURROUNDING AREA BY THE GENERAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING LOCATIONS.
- 2.3 BLANK-OFF ALL UNUSED DUCT OPENINGS WITH SAME GAUGE METAL AS EXISTING DUCT AND SEAL AIR TIGHT. INSULATED DUCTS SHALL BE INSULATED WITH SAME INSULATION MATERIAL AND THICKNESS AS EXISTING AND SEALED VAPOR TIGHT.

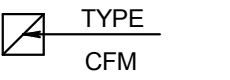
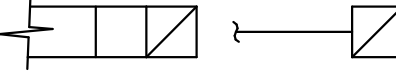
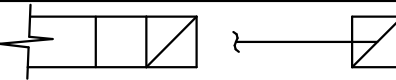
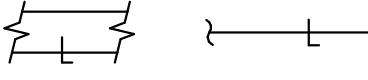
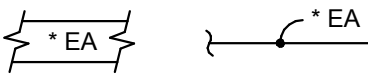
3. SHOP DRAWINGS

- 3.A CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE FOLLOWING MATERIALS AND EQUIPMENT:
- 3.A.1 ALL HEATING AND COOLING EQUIPMENT
- 3.A.2 VIBRATION ISOLATORS
- 3.A.3 FANS
- 3.A.4 AIR DEVICES
- 3.A.5 TEMPERATURE CONTROLS
- 3.A.6 TESTING AND BALANCING REPORTS
- 3.A.7 OPERATION AND MAINTENANCE MANUALS
- 3.B MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF MECHANICAL EQUIPMENT REQUIREMENTS WITH THE GENERAL CONTRACTOR. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: UTILITY REQUIREMENTS (ELECTRIC, GAS, ETC), SIZE AND WEIGHT. MODIFICATIONS REQUIRED DUE TO CONTRACTOR ORIGINATED DEVIATIONS FROM THE "BASIS OF DESIGN" OR "PROTOTYPE" DATA SHALL BE INCORPORATED AT NO ADDITIONAL COST TO THE OWNER.

4. EQUIPMENT

- 4.A GENERAL:
- 4.A.1 REFER TO EQUIPMENT SCHEDULES FOR ADDITIONAL REQUIREMENTS.
- 4.A.2 ALL EQUIPMENT SHALL BE IDENTIFIED BY STENCILING THE TITLE OF THE EQUIPMENT AS DETERMINED BY THE OWNER'S REPRESENTATIVE. IF THE OWNER'S REPRESENTATIVE DOES NOT EXPRESS A PREFERENCE THEN IDENTIFICATION SHALL BE TAKEN FROM THE PLANS AND SHALL BE LOCATED IN A POSITION THAT IS CLEARLY VISIBLE. THE LETTERS SHALL BE MADE WITH BLACK PAINT AND SHALL BE NOT LESS THAN 2" HIGH. THE TITLES SHALL BE SHORT AND CONCISE.
- 4.C AIR DEVICES:
- 4.C.1 STEEL CONSTRUCTION WITH ENAMEL FINISH (COLOR BY ARCHITECT).
- 4.C.2 ACCEPTABLE MANUFACTURERS: TITUS, KRUEGER, TUTTLE & BAILEY, METALAIRE, ANEMOSTAT OR CARNES.
- 4.E FANS:
- 4.E.1 EACH FAN SHALL BE AMCA CERTIFIED AND LABELED.
- 4.E.2 EACH FAN SHALL BE UL LISTED AND LABELED.
- 4.E.3 ALL WIRING AND CONDUIT PROVIDED AS PART OF THE UNIT SHALL BE IN ACCORDANCE WITH NEC.
- 4.E.4 ACCEPTABLE MANUFACTURERS: COOK, GREENHECK OR PENN.
5. VIBRATION ISOLATORS
- 5.A PROVIDE COMBINATION SPRING AND DOUBLE DEFLECTION NEOPRENE ISOLATION HANGERS FOR ALL SUSPENDED FANS AND EQUIPMENT 100 LBS. OR GREATER.
- 5.B PROVIDE DOUBLE DEFLECTION NEOPRENE ISOLATION HANGERS FOR SUSPENDED FANS AND EQUIPMENT LESS THAN 100 LBS.
- 5.C QUANTITY AND LOCATION OF ISOLATORS SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.
- 5.D AFTER INSTALLATION AND START-UP, CONTRACTOR SHALL THOROUGHLY CHECK EACH ITEM OF EQUIPMENT FOR VIBRATION TRANSMISSION TO THE STRUCTURE OR EXCESSIVE NOISE, AND IF EITHER OCCURS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING THE FAULTY SITUATION IMMEDIATELY.
6. DUCTWORK
- 6.A GENERAL: CONSTRUCT ALL DUCTWORK AND ACCESSORIES IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA STANDARDS FOR 2" PRESSURE GLASS AND SEAL GLASS B.
- 6.B METAL DUCTWORK: UNLESS OTHERWISE NOTED, FABRICATE ALL DUCTWORK, HOUSING, DAMPERS, AND ALL OTHER DUCT RELATED ACCESSORIES FROM ALUMINUM CONSTRUCTION SHEETS.
- 6.B.1 GALVANIZED STEEL SHEETS: LOCK-FORMING QUALITY; COMPLYING WITH ASTM A 653/A 653M; DUCTS SHALL HAVE MILL-PHOSPHATIZED FINISH FOR SURFACES EXPOSED TO VIEW.
- 6.C INSTALL ALL DUCTWORK ABOVE CEILING AND HOLD TIGHT TO UNDERSIDE OF STRUCTURE ABOVE UNLESS OTHERWISE INDICATED.
- 6.D INSTALL OUTSIDE AIR INTAKES A MINIMUM OF 10'-0" FROM ANY EXHAUST OR PLUMBING VENT.
- 6.E CHANGES TO DUCT DUE TO FIELD CONDITIONS SHAL BE MADE ONLY IF THE DUCT SIZE FREE AREA IS MAINTAINED AND SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL.
- 6.F LEAKAGE
- 6.F.1 ALL DUCT JOINTS SHALL BE SEALED WITH HARDCAST 601.
- 6.F.2 LEAKAGE TESTING FOR ALL DUCTWORK SHALL BE BY PHYSICAL SENSATION AND SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
- 6.F.3PERFORM ALL TESTING AFTER THE SEALS HAVE CURED COMPLETELY AND BEFORE COVERING WITH INSULATION OR CONCEALING IN MASONRY.
7. TEST AND BALANCING
- 7.A SCOPE:
- 7.A.1 AN INDEPENDENT CONTRACTOR WITH NEBB OR AABC CERTIFICATION SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICES AND PERFORM ALL OPERATIONS REQUIRED FOR COMPLETE BALANCING OF THE MECHANICAL SYSTEMS AND RELATED WORK AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.
- 7.A.2 BALANCING SHALL NOT BE PERFORMED UNTIL ALL MECHANICAL EQUIPMENT IS PROPERLY INSTALLED AND IS 100% OPERATIONAL. ALL TEMPERATURE CONTROLS ARE INSTALLED AND CALIBRATED AND ALL SYSTEMS ARE CLEANED, PIPING AND STRAINERS FLUSHED, AND CLEAN FILTERS INSTALLED.
- 7.A.3 IT IS THE INTENT OF THIS SPECIFICATION TO ENSURE THAT THE ENTIRE PROJECT IS SUBSTANTIALLY COMPLETE SO THAT ALL COMPONENTS OF ALL MECHANICAL SYSTEMS CAN BE PUT INTO NORMAL OPERATION WITH ALL WINDOWS AND DOORS CLOSED AND BALANCED IN THAT CONDITION. IN NO CASE IS THE CONTRACTOR TO PERFORM HIS WORK IN PIECEMEAL FASHION.
- 7.A.4 QUALITY ASSURANCE: SUBMIT TO OWNER THREE (3) COPIES OF BALANCING AND TESTING RECORDS SPECIFIED HEREIN SHOWING THE MECHANICAL SYSTEMS HAVE BEEN BALANCED AND ARE DELIVERING SPECIFIED QUANTITIES.
- 7.A.5 EACH PIECE OF EQUIPMENT SHALL BE IDENTIFIED AS TO LOCATION, SERVICE, MANUFACTURER AND MODEL NUMBER. THIS INFORMATION SHALL BE RECORDED AND INCLUDED IN THE FINAL BALANCE REPORT.
- 7.B AFTER ADJUSTMENTS ARE COMPLETED, THE MECHANICAL SYSTEMS SHALL BE TESTED, AND THE FOLLOWING INFORMATION RECORDED AND INCLUDED IN THE FINAL BALANCE REPORT:

- 7.B.1 AIR DEVICES: EACH AIR DEVICE SHALL BE IDENTIFIED AS TO LOCATION AND SERVICE SIZE, TYPE AND MANUFACTURER OF AIR DEVICE LISTED REQUIRED CFM AND TEST RESULTANT CFM EACH DEVICE
- 7.B.2 FANS: TOTAL AIR FLOW EXTERNAL STATIC PRESSURE MOTOR FULL LOAD AMPS VOLTAGE
- 7.C AFTER THE SYSTEMS HAVE BEEN BALANCED AND ALL ADJUSTMENTS COMPLETED, RUN A SIX HOUR TEST ON BOTH HEATING AND COOLING CYCLE TO DETERMINE IF SYSTEM IS RESPONDING TO TEMPERATURE CONTROLS. THERMOSTAT TEMPERATURE READING, AND AN INDEPENDENT TEMPERATURE MEASUREMENT AT THE THERMOSTAT SHALL BE RECORDED AT EACH THERMOSTAT.
8. TEMPERATURE CONTROL
- 8.A CONTRACTOR SHALL BE RESPONSIBLE FOR INTERFACING THE NEW ATC WORK WITH THE EXISTING TEMPERATURE CONTROLS.
- 8.B POWER FOR MOTORIZED ACTUATORS AND CONTROLS SHALL BE THE RESPONSIBILITY OF THE CONTROLS CONTRACTOR. ALL WIRING ABOVE 24 VOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE ELECTRICAL SPECIFICATIONS AND THE NATIONAL ELECTRIC CODE.
- 8.C THERMOSTATS SHALL BE COMPATIBLE WITH EXISTING ATC SYSTEM.
- 8.D THERMOSTAT LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS. MOUNT THERMOSTATS 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.
- 8.E MOUNT ALL THERMOSTATS ON EXTERIOR WALLS ON AN INSULATED SUB-BASE.
- 8.F PROVIDE INITIAL SETUP AND PROGRAMMING OF ALL CONTROLS AND DEMONSTRATE TO OWNER.
- 8.G CONTRACTOR SHALL TAKE EXTRA CARE WHEN REMOVING/RELOCATING THE EXISTING EQUIPMENT SO THAT EXISTING CONTROL COMPONENTS ARE NOT DAMAGED. RECONNECT ALL THERMOSTATS TO THE ASSOCIATED EQUIPMENT AS REQUIRED.

MECHANICAL SYMBOLS AND ABBREVIATIONS		
ABBR.	SYMBOL	REMARKS
		HORIZONTALLY MOUNTED EXHAUST/RETURN AIR REGISTER/GRILLE
		RECTANGULAR DUCTWORK EXHAUST/RETURN/RELIEF AIR ELBOW UP
		RECTANGULAR DUCTWORK EXHAUST/RETURN/RELIEF AIR ELBOW DOWN
VD		VOLUME DAMPER
EA		EXHAUST AIR (" DUCT SIZE)
24"Ø		ROUND DUCT SIZE
24X12		RECTANGULAR DUCT SIZE, FIRST NUMBER INDICATES SIZE FOR SIDE SHOWN
Ⓣ		THERMOSTAT
→		DOOR UNDERCUT AIR FLOW DIRECTION

MECHANICAL ABBREVIATIONS	
ABBR.	REMARKS
BHP	BREAK HORSE POWER
CFM	CUBIC FEET PER MINUTE
EF	EXHAUST FAN
EFF	EFFICIENCY
HP	HORSE POWER
IN	INCH
MAX	MAXIMUM
MIN	MINIMUM
RPM	REVOLUTIONS PER MINUTE
TSP	TOTAL STATIC PRESSURE
W	WATT



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

451 HUNGERFORD DRIVE 4TH FLOOR ROCKVILLE, MD 20850

(P)301.770.3520 (F)301.770.3521 www.nikasolutions.com

Professional Certification.

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

COVER SHEET - MECHANICAL

Phase

☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

A/E Project Number
12-0009.012

Date
06.30.2016

Drawing Scale: AS NOTED


CADD Filename
Revit Model

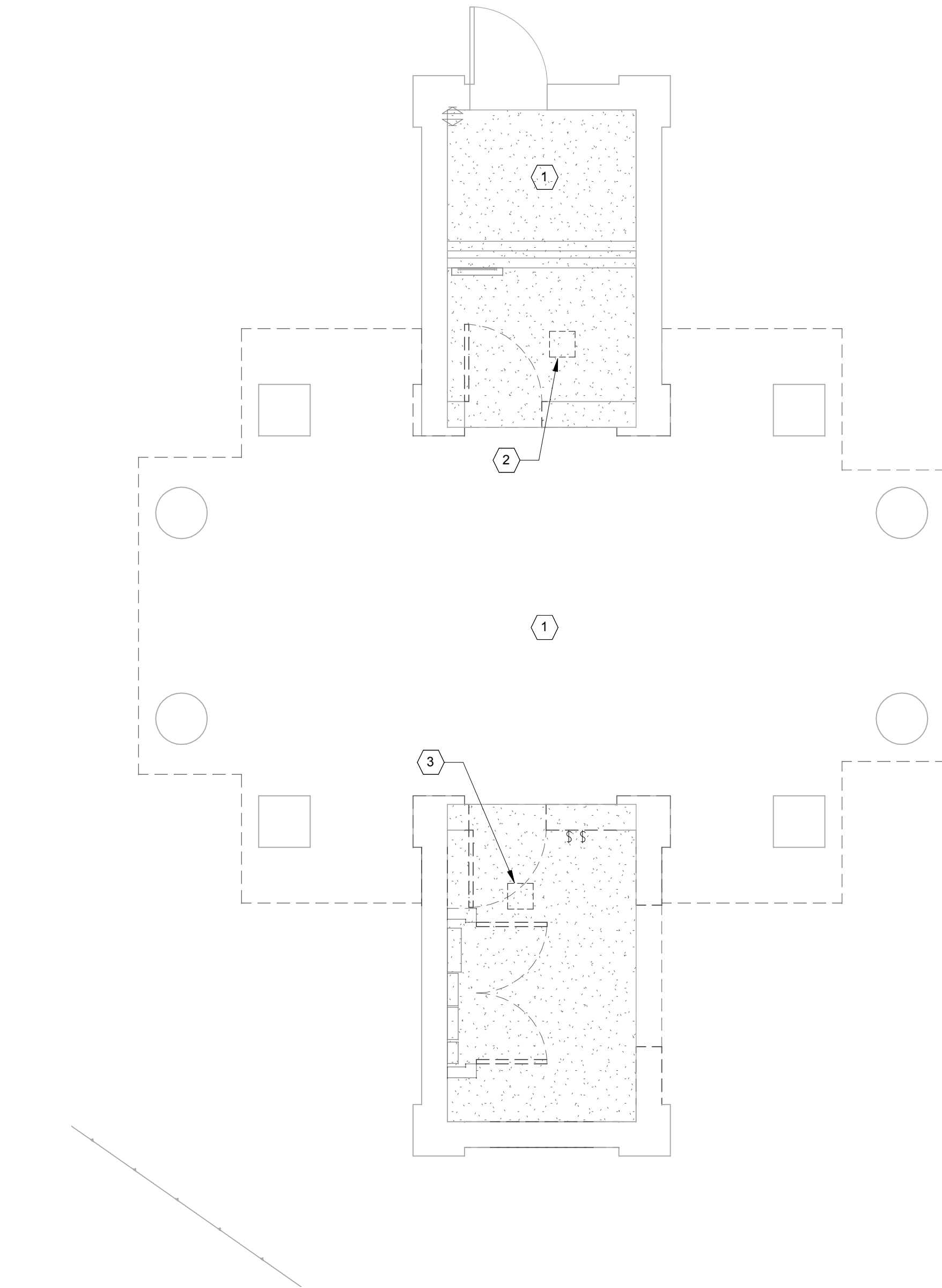
CADD Plot Scale
1:1

Drawn By
FB

Checked By
AK

Sheet Number
M001

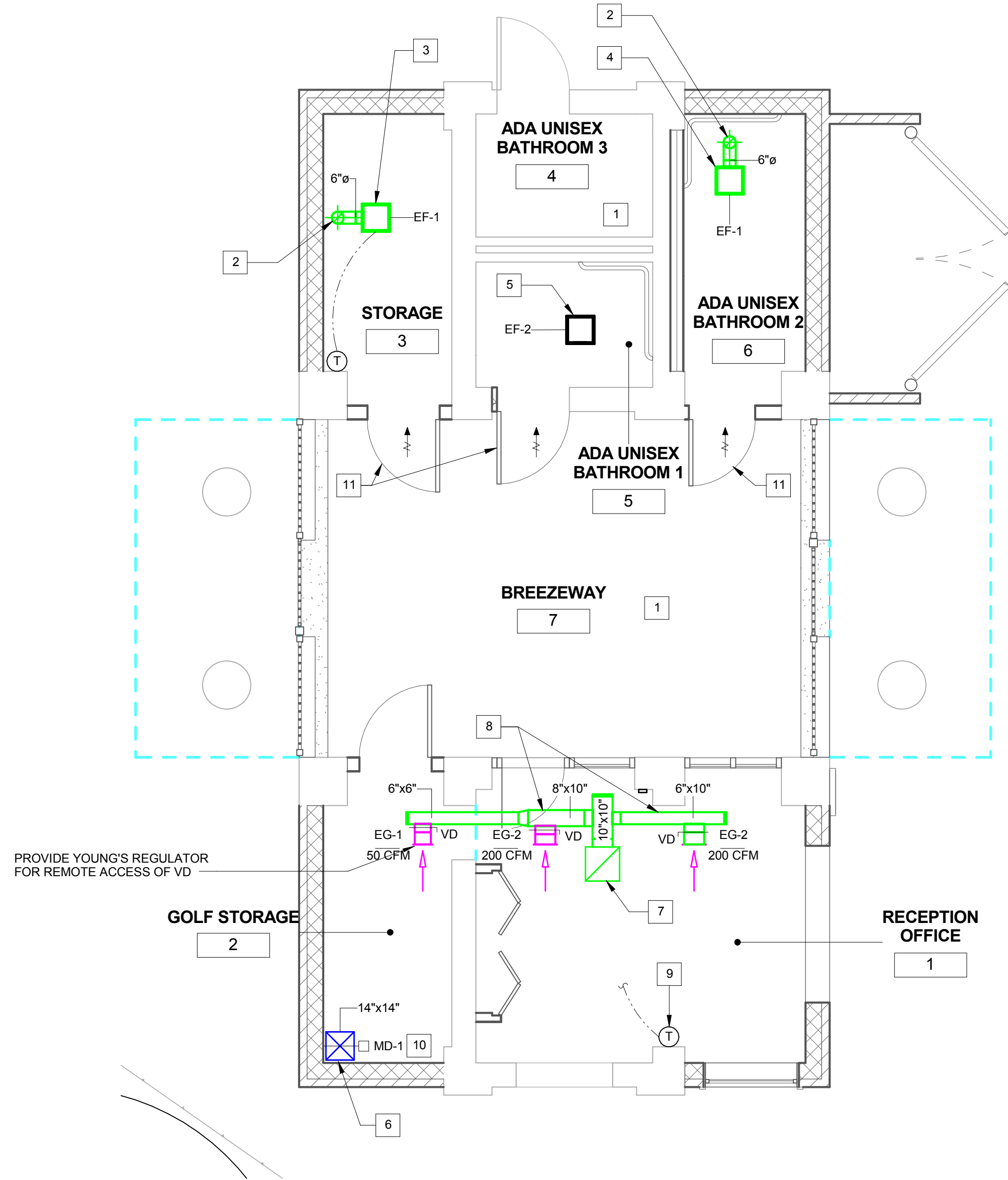




1 MECHANICAL PLAN - DEMOLITION
1/4" = 1'-0"

DEMOLITION KEY NOTES: #

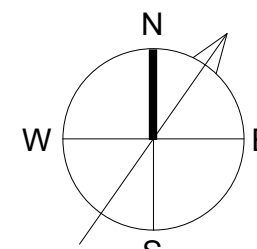
1. NO MECHANICAL DEMOLITION WORK IN THIS AREA.
2. REMOVE EXHAUST FAN, EXISTING EXHAUST DUCTWORK, ELECTRICAL CONNECTIONS, AND CONTROLS SHALL BE REUSED WITH NEW INSTALLATION.
3. REMOVE FAN, ASSOCIATED DUCTWORK, ELECTRICAL CONNECTIONS, AND CONTROLS.



2 MECHANICAL PLAN
1/4" = 1'-0"

NEW WORK KEY NOTES: #

1. NO NEW MECHANICAL WORK IN THIS AREA.
2. 6" EXHAUST DUCT UP THROUGH ROOF. TERMINATE PER GOOSENECK DETAIL ON SHEET M501.
3. EXHAUST FAN TO BE CONTROLLED WITH A WALL MOUNTED THERMOSTAT. SET FAN TO OPERATE AT 80 °F (ADJ.).
4. EXHAUST FAN TO BE CONTROLLED WITH A LIGHT SWITCH. SEE ELECTRICAL DWGS FOR ADDITIONAL INFORMATION.
5. EXHAUST FAN TO BE CONNECTED WITH EXISTING EXHAUST DUCTWORK. REUSE EXISTING ELECTRICAL CONNECTIONS AND CONTROLS.
6. 14" X 14" MAKE-UP AIR DUCT. TERMINATE DUCT UP THROUGH ROOF PER GOOSENECK DETAIL ON SHEET M501. INSIDE THE SPACE, TERMINATE DUCT 12" OF FLOOR WITH WIRE SCREEN AT OPEN END.
7. EXHAUST DUCT UP TO EF-3 ON ROOF. DUCT SIZE SHALL MATCH FULL FAN OPENING. SEE ROOF MOUNTED EXHAUST FAN DETAIL FOR ADDITIONAL INFORMATION.
8. INSTALL EXHAUST DUCTWORK AND ASSOCIATED AIR DEVICES ABOVE DECORATIVE-OPEN CEILING.
9. WALL MOUNTED THERMOSTAT TO CONTROL EF-3. SET FAN TO OPERATE AT 75 °F (ADJ.).
10. INSTALL MOTORIZED DAMPER MD-1 INSIDE THE SPACE. WITHIN 6" OF ROOF PENETRATION. INTERLOCK MD-1 OPERATION WITH EF-3 TO OPEN WHEN FAN IS RUNNING AND TO CLOSE WHEN FAN STOPS.
11. PROVIDE 1" DOOR UNDERCUT.



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

MECHANICAL FLOOR PLANS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

A/E Project Number
12-0009.012

Date
06.30.2016

Drawing Scale: AS NOTED
CADD Filename
Revit Model
1:1

Drawn By
FB

Checked By
AK

Sheet Number

M101

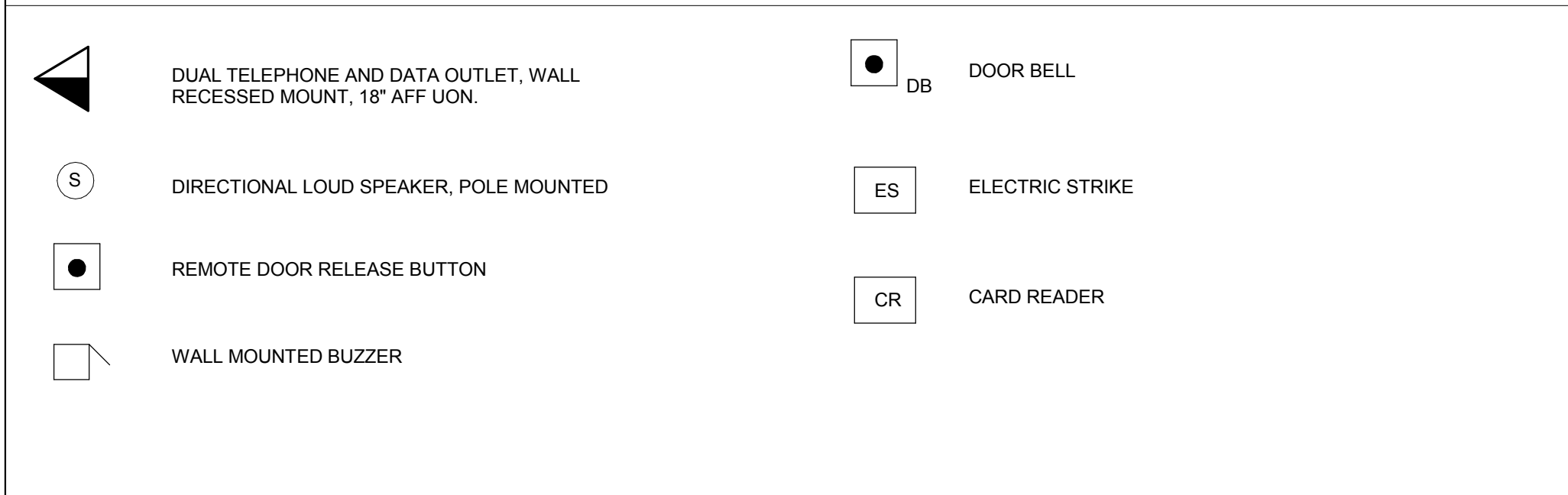
Professional Engineer

<u>POWER SYMBOLS</u>	
	MOTOR STARTER
	PANEL BOARD, NORMAL POWER
	JUNCTION BOX, MOUNTING AS INDICATED MOUNTED
	WORK TO BE DEMOLISHED/REWORKED
	EXISTING TO REMAIN
	NEW WORK
	125V, SIMPLEX RECEPTACLE, NEMA 5-20R, WALL RECESSED MOUNTED 18" AFF, UON.
	125V, DUPLEX RECEPTACLE, NEMA 5-20R, WALL RECESSED MOUNTED 18" AFF, UON.
	125V, QUADRUPLUX RECEPTACLE, NEMA 5-20R, WALL RECESSED MOUNTED 18" AFF, UON.
	UNDERGROUND ELECTRICAL CONDUIT

RECEPTACLE SUFFIXES

GFCI = GROUND FAULT CIRCUIT INTERRUPTER
WP = WEATHER PROOF

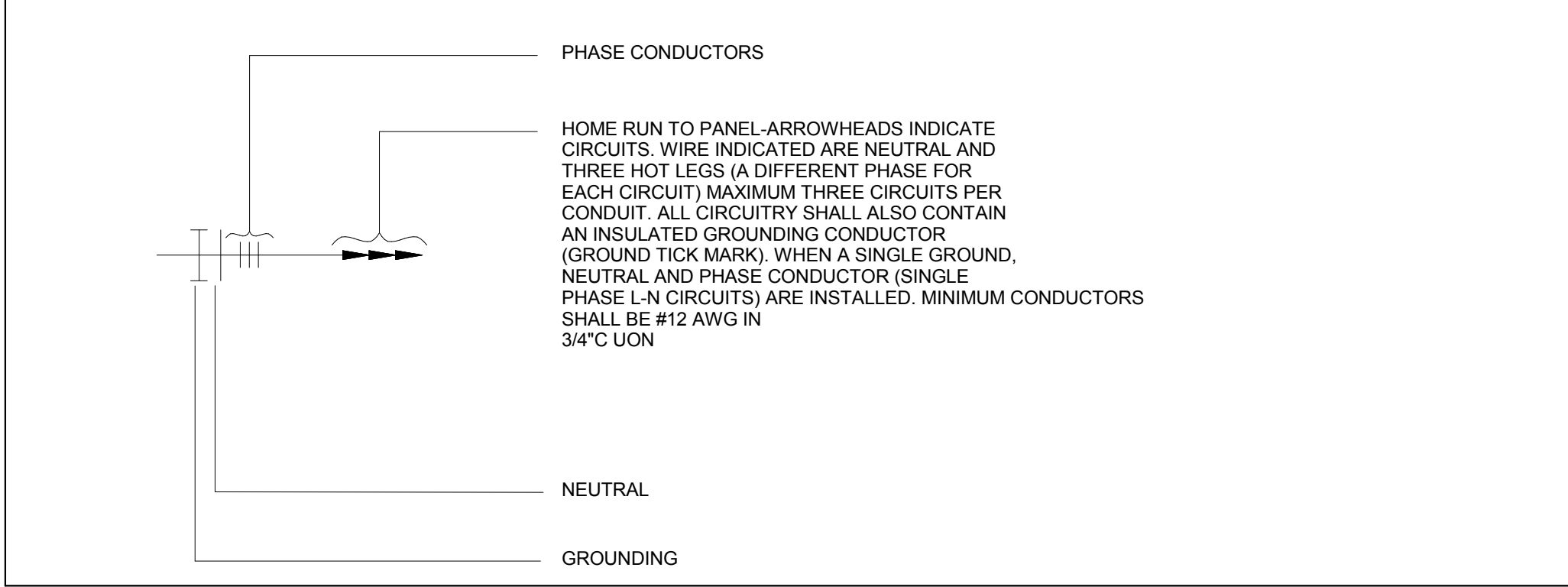
LOW VOLTAGE SYMBOLS



LIGHTING FIXTURE SYMBOLS



HOMERUN SPECIFICATION

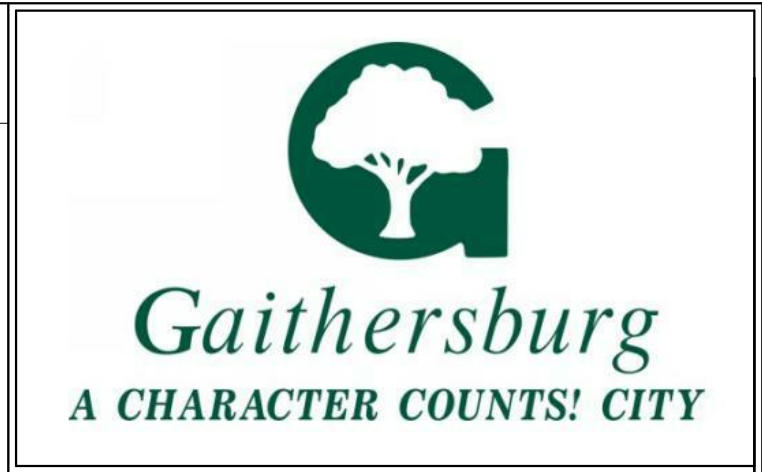


ABBREVIATIONS

A	AMPERES
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERES INTERRUPTING CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
BC	BARE COPPER
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
C	CONDUIT
CAB	CABINET
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
CONTR	CONTRACTING OFFICER
CP	CONTROL PANEL
CT'S	CURRENT TRANSFORMERS
CU	COPPER
DEMO	DEMOLITION
DS	DISCONNECT SWITCH
DWG	DRAWING(S)
EF	EXHAUST FAN
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EQUIP	EQUIPMENT
ERB	EMERGENCY RELEASE BUTTON
EWG	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
ETR	EXISTING TO REMAIN
EX	EXISTING
FLA	FULL LOAD AMPERES
FLUOR	FLUORESCENT
GEC	GROUNDING ELECTRODE CONDUCTOR
GEN	ENGINE GENERATOR SET
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFGI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
GFS	GROUND FAULT SENSOR
GND	GROUND
GYP	GYPSONUM
HGT	HEIGHT
HID	HIGH INTENSITY DISCHARGE
HPS	HIGH PRESSURE SODIUM
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HV	HIGH VOLTAGE
INC	INCANDESCENT
JB	JUNCTION BOX
KV	KILO-VOLTS
KVA	KILO-VOLTS-AMPERES
KVAR	KILO-VOLTS-AMPERES REACTIVE
KW	KILO-WATTS
KWH	KILO-WATT-HOURS
LAN	LOCAL AREA NETWORK
LTG	LIGHTING
m	METER
MM	MILLIMETER
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MGB	MAIN GROUND BAR
MH	METAL HALIDE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTR	MOTOR
MTD	MOUNTED
MTG	MOUNTING
NEC	NATIONAL ELECTRICAL CODE
PNL	PANEL
PRI	PRIORITY
PVC	POLYVINYL CHLORIDE
REC	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
TEL	TELEPHONE
TYP	TYPICAL
UCF	UNDERGROUND COMMUNICATION
UFC	UNIFIED FACILITIES CRITERIA
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UP	UNDERGROUND POWER
UPS	UNINTERRUPTIBLE POWER SUPPLY
US	UNDERGROUND SECURITY
V	VOLTS
VA	VOLT-AMPERES
VFC	VARIABLE FREQUENCY CONTROLLER
W	WATTS
WHE	WAREHOUSE
WP	WEATHER PROOF
XFMR	TRANSFORMER

GENERAL NOTES

1. ALL WORK SHOWN IS DIAGRAMMATIC AND IS FOR CIRCUIT ALLOCATION ONLY. THE DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL EQUIPMENT. COORDINATE ALL DEVICE LOCATIONS WITH ACTUAL DOOR SWINGS, CABINETS, COUNTERS, ETC., AS INDICATED IN ARCHITECTURAL DRAWINGS.
2. REFER TO ALL CONTRACT DOCUMENTS FOR POSSIBLE INTERFERENCES, BEFORE BID IS MADE. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE TO THE CONTRACTOR BY REASON OF HIS FAILURE TO HAVE MADE SUCH EXAMINATIONS OR OF ANY ERROR ON HIS PART.
3. ALL DISCONNECTS SHALL HAVE A SEPARATE GROUND BAR AND A NEUTRAL BAR.
4. ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INDICATING EQUIPMENT SERVED AND ROOM NUMBER (AS INDICATED ON FINAL BUILDING SIGNAGE) OF EQUIPMENT LOCATION, SPARE, OR SPACE. UPDATE DIRECTORIES FOR ALL ALTERED PANELS. LABEL AND IDENTIFY ALL JUNCTION BOXES WITH PANEL AND CIRCUIT NUMBER.
5. SEPARATE NEUTRAL CONDUCTORS TO BE RUN WITH ALL BRANCH CIRCUITS.
6. ALL CIRCUITS TO BE RUN WITH GREEN GROUNDING CONDUCTOR SIZED PER NEC 250.122.
7. MOUNTING HEIGHTS OF ALL DEVICES ARE TO CENTER OF DEVICE, OUTLET, FIXTURE OR EQUIPMENT UNLESS OTHERWISE NOTED.
8. CONSOLIDATION OF INDIVIDUAL CONDUIT HOME RUNS SHOWN ON THE DRAWINGS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL. LIGHTING AND RECEPTACLE CIRCUITS ONLY MAY BE EXEMPTED, LIMITED TO NOT MORE THAN THREE CIRCUITS PER CONDUIT HOMERUN.
9. PROVIDE GROUNDING TYPE EXPANSION FITTINGS OR OTHER APPROVED METHODS TO ALLOW FOR EXPANSION, CONTRACTIONS AND DEFLECTION WHERE CONDUITS CROSS EXPANSION JOINTS.
10. ALL EMPTY CONDUITS SHALL BE FURNISHED WITH PULL-WIRE AND WILL BE STUBBED-UP A.F.F., OR ABOVE SUSPENDED CEILING AS THE CASE MAY BE, AND SHALL BE CAPPED AT BOTH ENDS.
11. NUMBER OF BENDS IN A CONDUIT SECTION RUN SHALL NOT EXCEED FOUR 90-DEGREE BENDS, OR EQUIVALENT OF SWEEPS AND RADIUS BENDS.
12. ALL LOW VOLTAGE COMMUNICATIONS WIRING SHALL BE ROUTED IN EMT CONDUITS, OR OTHER APPROVED CONDUITS, EXCEPT WHERE RUN IS CONCEALED IN ACCESSIBLE AREAS. ALL EXPOSED WIRING SHALL BE PLENUM RATED AND SUPPORTED AS REQUIRED BY CODE.
13. WIRING FOR ALL LOW VOLTAGE COMMUNICATION SYSTEMS SHALL BE RUN IN DEDICATED RACEWAYS AND NOT SHARED WITH POWER WIRING OR OTHER SYSTEMS.
14. VERIFY MECHANICAL EQUIPMENT SWITCH AND CONNECTION REQUIREMENTS, ITEM BY ITEM WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN AND WIRING OF EQUIPMENT. RESOLVE ALL DISCREPANCIES WITHOUT FURTHER COST TO THE OWNER.
15. WHERE MOUNTING HEIGHTS ARE NOT DETAILED, INSTALL ELECTRICAL SERVICES AND OVERHEAD EQUIPMENT TO PROVIDE MAXIMUM HEADROOM POSSIBLE. INSTALL ELECTRICAL EQUIPMENT TO FACILITATE MAINTENANCE, REPAIR AND REPLACEMENT OF EQUIPMENT AND COMPONENTS AS MUCH AS PRACTICAL. CONNECT THE EQUIPMENT FOR EASE OF DISCONNECTING WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
16. WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OF INSTALLATION OR NATURE OF WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COSTS TO COTR. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION OF THE COTR.
17. WHERE THE CONTRACTOR REQUESTS APPROVAL OF AN ITEM OF EQUIPMENT WHICH DEVIATES FROM THE REQUIREMENTS OF THE DRAWINGS AND WILL REQUIRE A REDESIGN OF STRUCTURE, PARTITIONS, FOUNDATIONS, PIPING, WIRING, OR ANY OTHER PART OF THE MECHANICAL, ELECTRICAL, OR ARCHITECTURAL LAYOUT, ALL SUCH REDESIGN, AND ALL NEW DRAWINGS AND DETAILING REQUIRED THEREFORE, SHALL BE PREPARED AND PAID FOR BY THIS CONTRACTOR AND SUBMITTED TO THE ARCHITECT FOR APPROVAL.
18. PROVIDE ALL POWER WIRING FOR POWER, WIRING SHALL INCLUDE FEEDERS, BRANCH CIRCUITS, DISCONNECT SWITCHES, EQUIPMENT TERMINALS. DISCONNECTS SHALL BE PROVIDED IN ACCORDANCE WITH CODE REQUIREMENTS WHETHER OR NOT SPECIFICALLY INDICATED ON DRAWINGS.
19. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ENFORCED EDITION OF THE NATIONAL ELECTRICAL CODE, N.F.P.A. 70, AND ALL LOCAL AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION.
20. ALL ELECTRICAL ITEMS, MATERIALS, DEVICES, APPLIANCES SHALL BE U.L. LABELED.
21. ALL NECESSARY ADDITIONS AND ALTERATIONS TO EXISTING WORK SHALL BE INCLUDED IN THE CONTRACT AS REQUIRED TO PROVIDE AND MAINTAIN A COMPLETE AND PROPER ELECTRICAL INSTALLATION. THIS WORK SHALL INCLUDE:
 - a. RELOCATION OF PULL BOXES, RACEWAYS, ETC., TO PERMIT THE INSTALLATION OF NEW EQUIPMENT.
 - b. DISCONNECTION/RECONNECTIONS/REMOVAL/REINSTALLATION OF ELECTRICAL SUPPLY, CONTROL, AND UTILIZATION EQUIPMENT REQUIRED FOR CONTINUED OPERATION, INCLUDING TEMPORARY WORK AS REQUIRED.
 - c. PROVISIONS FOR THE RELOCATION OF ALL PIPING, DUCTWORK, ETC., AS REQUIRED FOR ELECTRICAL WORK, WHERE NOT SHOWN OR SPECIFIED BY OTHERS. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE A/E TEAM PRIOR TO BID SO THAT THE APPROPRIATE TRADE MAY BE ASSIGNED TO BID; OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL SUCH RELOCATIONS.
 - d. EQUIPMENT TO BE TURNED OVER TO OWNER, SHALL BE TURNED OVER IN CLEAN AND WORKING CONDITION.
 - e. DISCONNECT ELECTRICAL SERVICES TO EQUIPMENT TO BE REMOVED. REMOVE ALL UNUSED CONDUIT AND CONDUCTORS BACK TO POINT OF SERVICE, OR NEXT ACTIVE DEVICE, UNLESS THEY ARE TO BE REUSED UNDER NEW CONSTRUCTION.
 - f. UNUSED CONDUITS CAN BE ABANDONED WHERE CONCEALED IN FLOORS OR WALLS, BUT MUST BE REMOVED FROM CEILING SPACES, EXPOSED AREAS AND ACCESSIBLE LOCATIONS.
 - g. WHERE WORK UNDER THIS CONTRACT REQUIRES EXTENSION, RELOCATION, RECONNECTIONS OR MODIFICATIONS TO EXISTING EQUIPMENT OR SYSTEMS, THE EXISTING EQUIPMENT OR SYSTEM SHALL BE RESTORED TO ITS ORIGINAL AND OPERATING CONDITION. EXTEND NEW HOMERUNS OR CIRCUIT EXTENSIONS, WHERE REQUIRED. DISCONNECT AND REMOVE ALL EQUIPMENT INDICATED TO BE DEMOLISHED, INCLUDING OUTLETS, DEVICES, RELAYS, AND CONDUCTORS.
22. MAINTAIN ELECTRICAL WORKING SPACE CLEARANCE PER NEC 110.26
23. GROUP NEARBY DEVICES IN A SINGLE GANG BOX.
24. COORDINATE HEIGHT OF OUTLETS WITH EQUIPMENT PRIOR TO ROUGH IN.



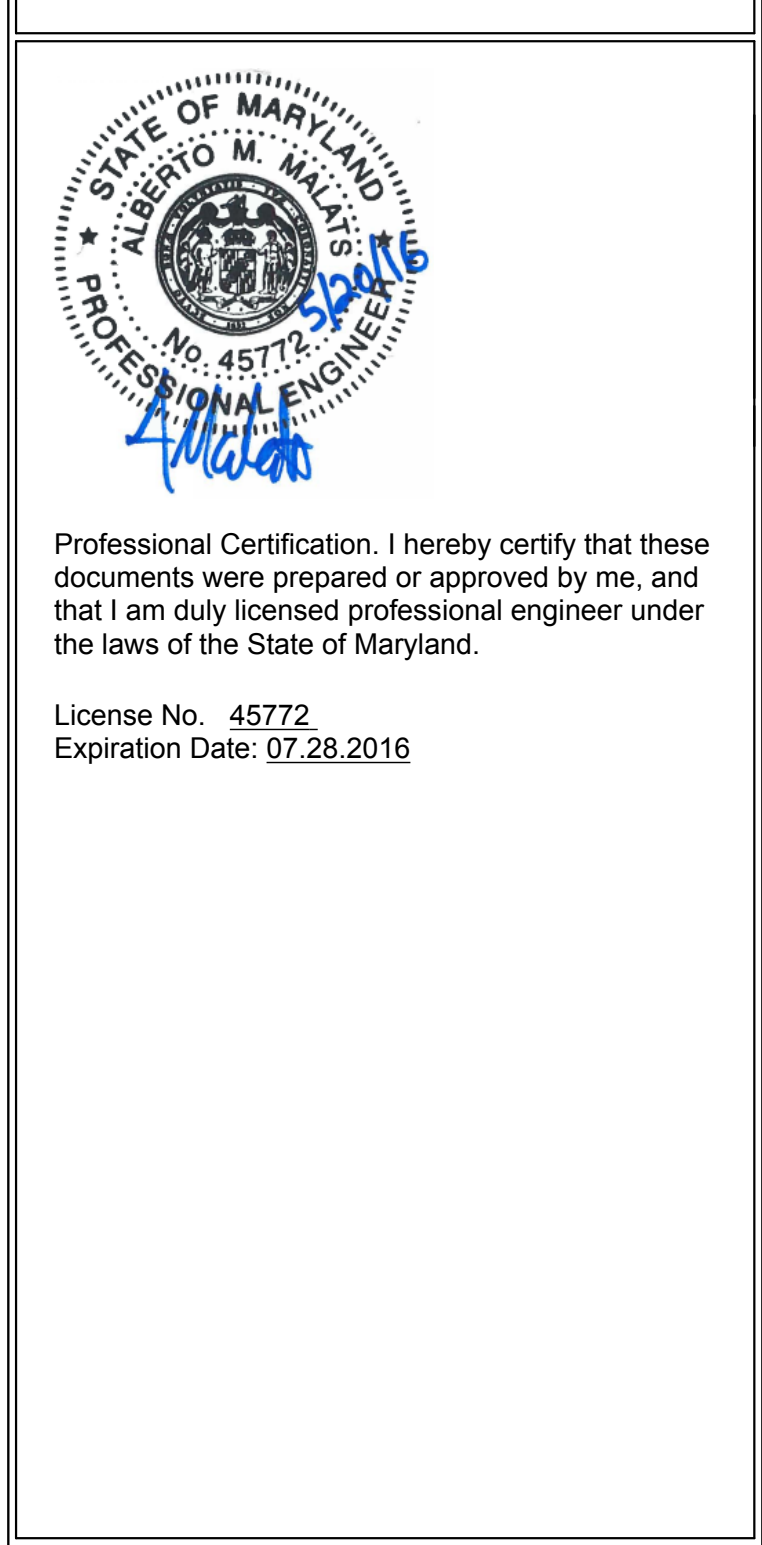
**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877


NIKA

NIKA

451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



License No. 45772
Expiration Date: 07.28.2016

[illegible]

Drawing Title
<h1 style="margin: 0;">ELECTRICAL SYMBOLS AND ABBREVIATIONS</h1>

Phase

☐ CONCEPT ☐ 35% ☐ 60% ☐ 80% ☒ 100%

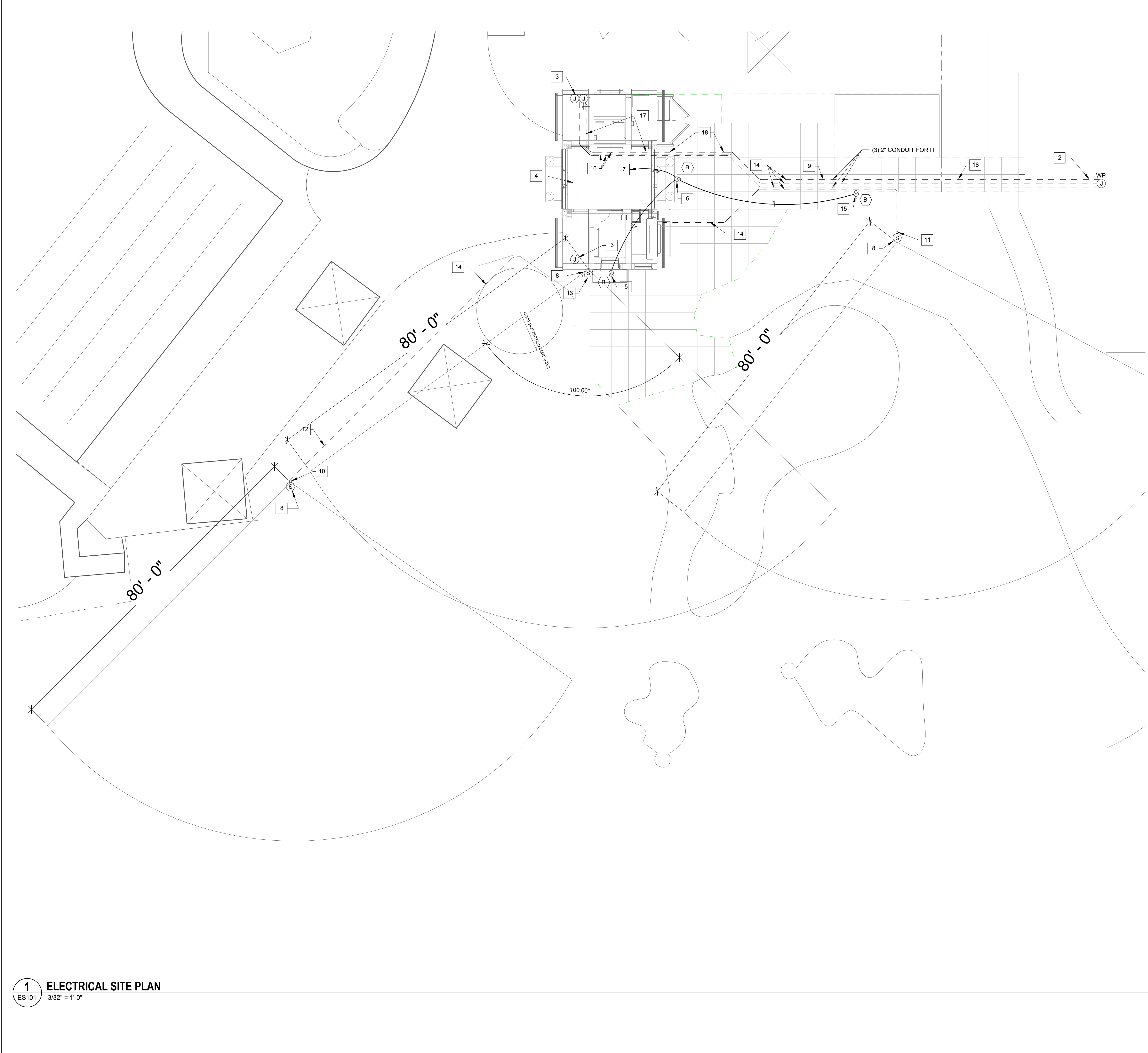
Date	CADD Filename	CADD Plot Scale
06.30.2016	Revit Model	1:1

	Drawn By JO
--	-------------

Checked By	AM
------------	----

Sheet Number **1004**

	E001
--	-------------



GENERAL NOTES

1. REFER TO SHEET EP501 FOR CONDUIT RISER.

KEY NOTES #

- NOT USED.
- NEW (3) 2" UNDERGROUND IT CONDUIT SHALL TERMINATE IN NEW 16"x16" WEATHERPROOF JUNCTION BOX. EXTEND CONDUITS FROM JUNCTION BOX TO PENETRATE ACTIVITIES BUILDING WITH 90° ELBOW ROUTED 10' A.F.F TO NEW 16"x16" JUNCTION BOX. SEE SHEET ES01 FOR DETAILS.
- PROVIDE 2 JUNCTION BOXES SIZE 10"x10" MOUNTED 12" A.F.F. TO SERVE DATA AND POWER. NO CONDUIT SHALL BE EXPOSED. REFER TO DETAIL 3 ON SHEET ES01.
- NEW 2" CONDUIT FOR IT AND 1" CONDUIT FOR POWER TO BE RUN UNDERGROUND.
- NEW 120V WALL MOUNTED LED FLOODLIGHT FIXTURE. FIXTURE TO BE MOUNTED AT 12'. TILT FIXTURE AT A 35° ANGLE.
- NEW 120V WALL MOUNTED LED FLOODLIGHT FIXTURE. FIXTURE TO BE MOUNTED AT 15'. TILT FIXTURE AT A 35° ANGLE.
- CONNECT NEW SITE LIGHTING TO EXISTING LOBBY LIGHT CIRCUIT.
- MOUNT NEW 30W, 70V, BOGEN SPT30A OR EQUIVALENT HORN LOUDSPEAKER 20'-0" A.F.F. HORN LOUD SPEAKER DISPERSION IS 100 DEGREES WITH A COVERAGE OF APPROXIMATELY 6,000 SQ. FT. AND RADIUS DISTANCE OF APPROXIMATELY 80'-0" OF CLEAR AUDIBLE SIGNALS.
- NEW (3) 2" CONDUIT FOR IT TO BE RUN UNDERGROUND.
- PROVIDE NEW EXTERIOR POLE FOR SPEAKER. COLOR AND SIZE IS TO MATCH EXISTING.
- EXISTING POLE FOR LIGHT FIXTURES AND SPEAKER.
- NEW 1" CONDUIT TO BE RUN UNDERGROUND FOR SPEAKER WIRING. ROUTE SPEAKER WIRING BACK TO JUNCTION BOX IN TICKET BOOTH FOR CONNECTION TO AMPLIFIER.
- SPEAKER TO BE MOUNTED ON WALL. HEIGHT SHALL MATCH PREVIOUS SPEAKER HEIGHT. PROVIDE 1" CONDUIT FOR SPEAKER WIRING. ROUTE SPEAKER WIRING BACK TO JUNCTION BOX IN TICKET BOOTH FOR CONNECTION TO AMPLIFIER.
- COORDINATE THE ROUTING OF ELECTRICAL CONDUIT WITH EXISTING UNDERGROUND CONDUIT AND PIPE.
- NEW 120V POLE MOUNTED LED FLOODLIGHT FIXTURE. FIXTURE TO BE MOUNTED AT 15'. TILT FIXTURE AT A 35° ANGLE.
- COORDINATE CONDUIT RUN WITH MECHANICAL AND PLUMBING PIPE, AND ALL FOOTINGS.
- CONDUIT TO BE BURIED AT 30" MINIMUM.
- CONDUIT TO BE BURIED AT 18" MINIMUM.



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877



NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

ELECTRICAL SITE PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

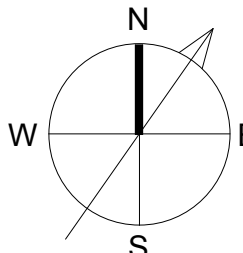
A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	

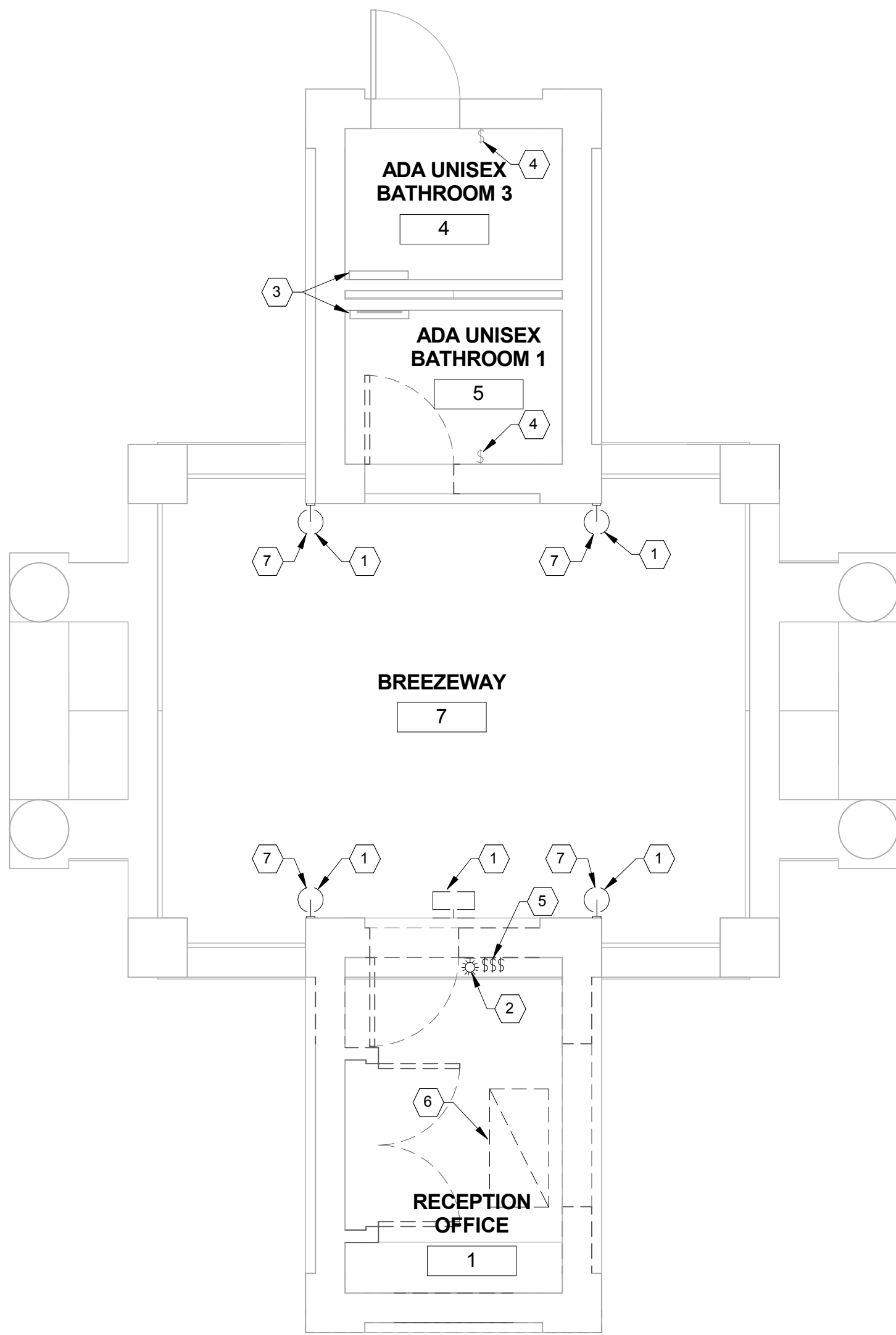
Drawn By JO

Checked By AM

Sheet Number

ES101





1 ELECTRICAL LIGHTING PLAN - DEMOLITION
EDL101 1/4" = 1'-0"

GENERAL NOTES

1. REMOVE ALL WIRING, DEVICES, AND FIXTURES IN OFFICE COMPLETELY BACK TO SOURCE.

KEY NOTES #

1. EXISTING WALL MOUNTED LIGHT FIXTURES ARE TO BE REMOVED.
2. EXISTING WALL MOUNTED FLOOD LIGHT IN RECEPTION OFFICE IS TO BE REMOVED.
3. EXISTING 2' LINEAR LIGHT FIXTURE IN BATHROOM IS TO REMAIN.
4. EXISTING LIGHT SWITCH IS TO REMAIN.
5. EXISTING LIGHT SWITCHES ARE TO BE DEMOLISHED.
6. EXISTING 2'x4' LIGHT FIXTURE IS TO BE REMOVED.
7. RETAIN WIRING FOR REUSE.



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

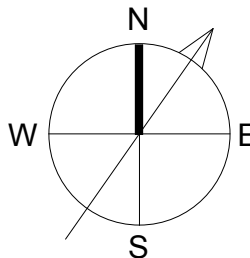
Drawing Title

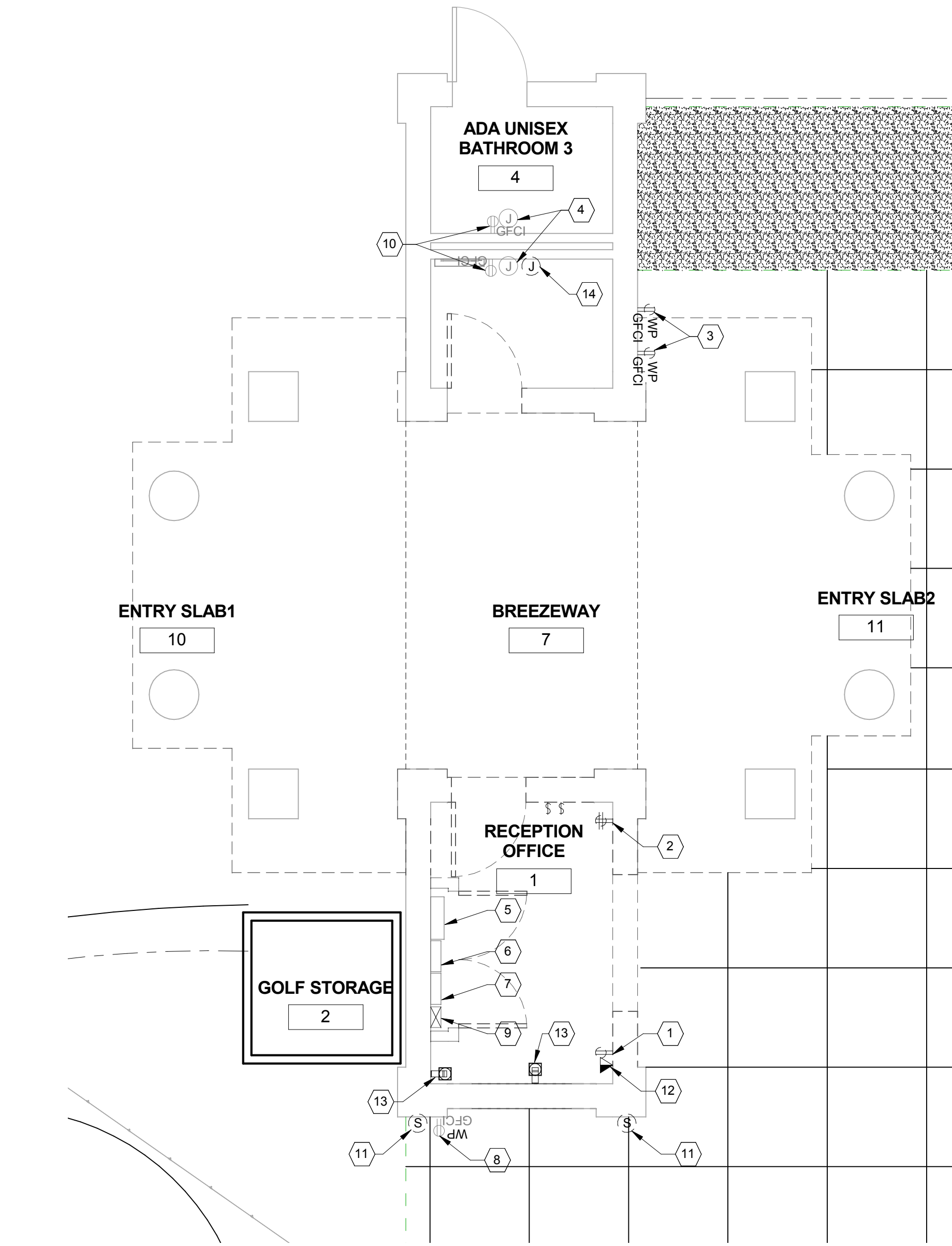
**ELECTRICAL LIGHTING PLAN -
DEMOLITION**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By JO	Sheet Number EDL101
Checked By AM	





1
EDP101
ELECTRICAL POWER PLAN - DEMOLITION
1/4" = 1'-0"

GENERAL NOTES

1. REMOVE ALL ELECTRICAL CONDUIT, WIRING, AND DEVICES FROM THE RECEPTION OFFICE.
2. REMOVE LOUD SPEAKER SYSTEM BACK TO SOURCE.
3. REMOVE DATA SYSTEM BACK TO SOURCE.
4. REMOVE CCTV SYSTEM BACK TO SOURCE.

KEY NOTES #

1. EXISTING DUPLEX RECEPTACLE IS TO BE REMOVED. EXISTING QUADRUPLEX RECEPTACLE IS TO BE REMOVED.
2. EXISTING QUADRUPLEX RECEPTACLE IS TO BE REMOVED.
3. EXISTING 120V WEATHERPROOF GFCI DUPLEX RECEPTACLES ARE TO BE REMOVED. RETAIN WIRING FROM ONE OF THE RECEPTACLES FOR REUSE.
4. EXISTING INSTANT WATER HEATERS ARE TO REMAIN.
5. EXISTING 120 / 208V, 100A, 3PH, PANEL G IS TO REMAIN.
6. EXISTING 120/ 208V, 200A, 3PH PANEL "MIDDLE" IS TO REMAIN.
7. EXISTING 120 / 208V, 200A, 3PH PANEL "LEFT" IS TO REMAIN.
8. EXISTING 120V WEATHERPROOF GFCI RECEPTACLE IS TO REMAIN.
9. EXISTING MOTOR STARTERS ARE TO REMAIN.
10. EXISTING 120V GFCI RECEPTACLES IN THE BATHROOMS ARE TO REMAIN.
11. EXISTING WALL MOUNTED LOUD SPEAKERS ARE TO BE REMOVED.
12. EXISTING DATA OUTLET IS TO BE REMOVED.
13. EXISTING SECURITY CAMERAS ARE TO BE REMOVED.
14. EXISTING HAND DRYER IS TO BE DEMOLISHED. REMOVE ALL WIRING BACK TO PANEL G.



A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016
3	REVISION # 3	07/19/2016

Revisions

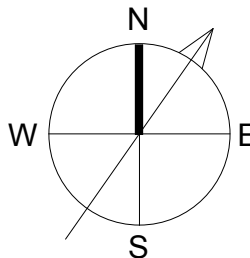
Drawing Title

**ELECTRICAL POWER PLAN -
DEMOLITION**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	

Drawn By JO	Checked By AM
Sheet Number EDP101	



GENERAL NOTES

1. SHOWN FOR REFERENCE PURPOSES ONLY



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

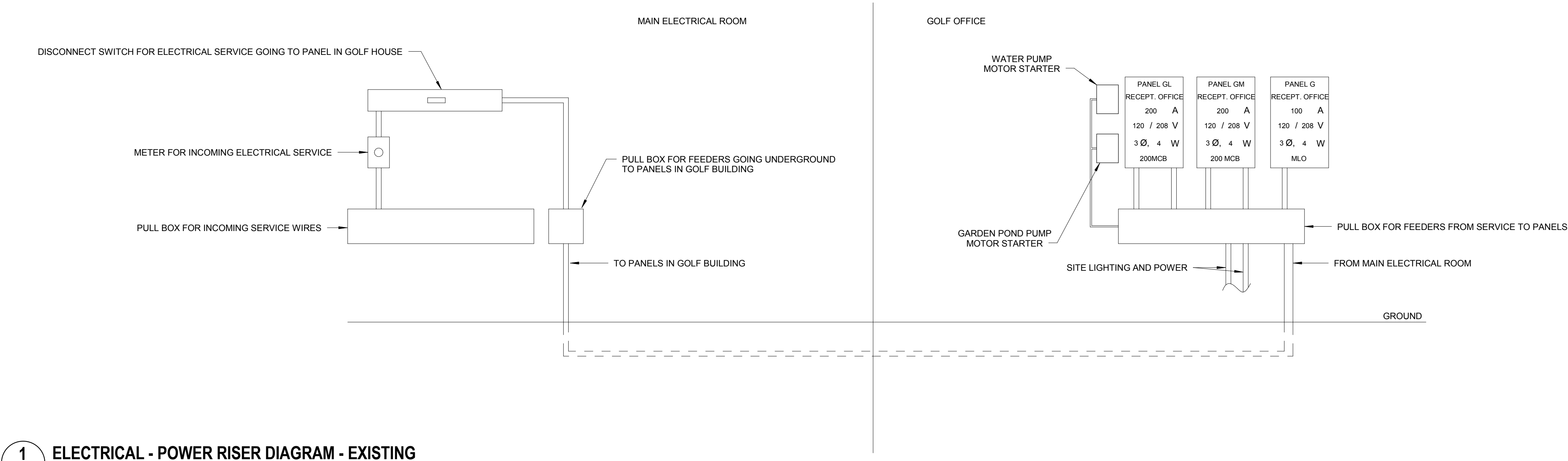


NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016



1 ELECTRICAL - POWER RISER DIAGRAM - EXISTING
EDP501/ N.T.S.

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title
**ELECTRICAL - POWER RISER
DIAGRAM - EXISTING**

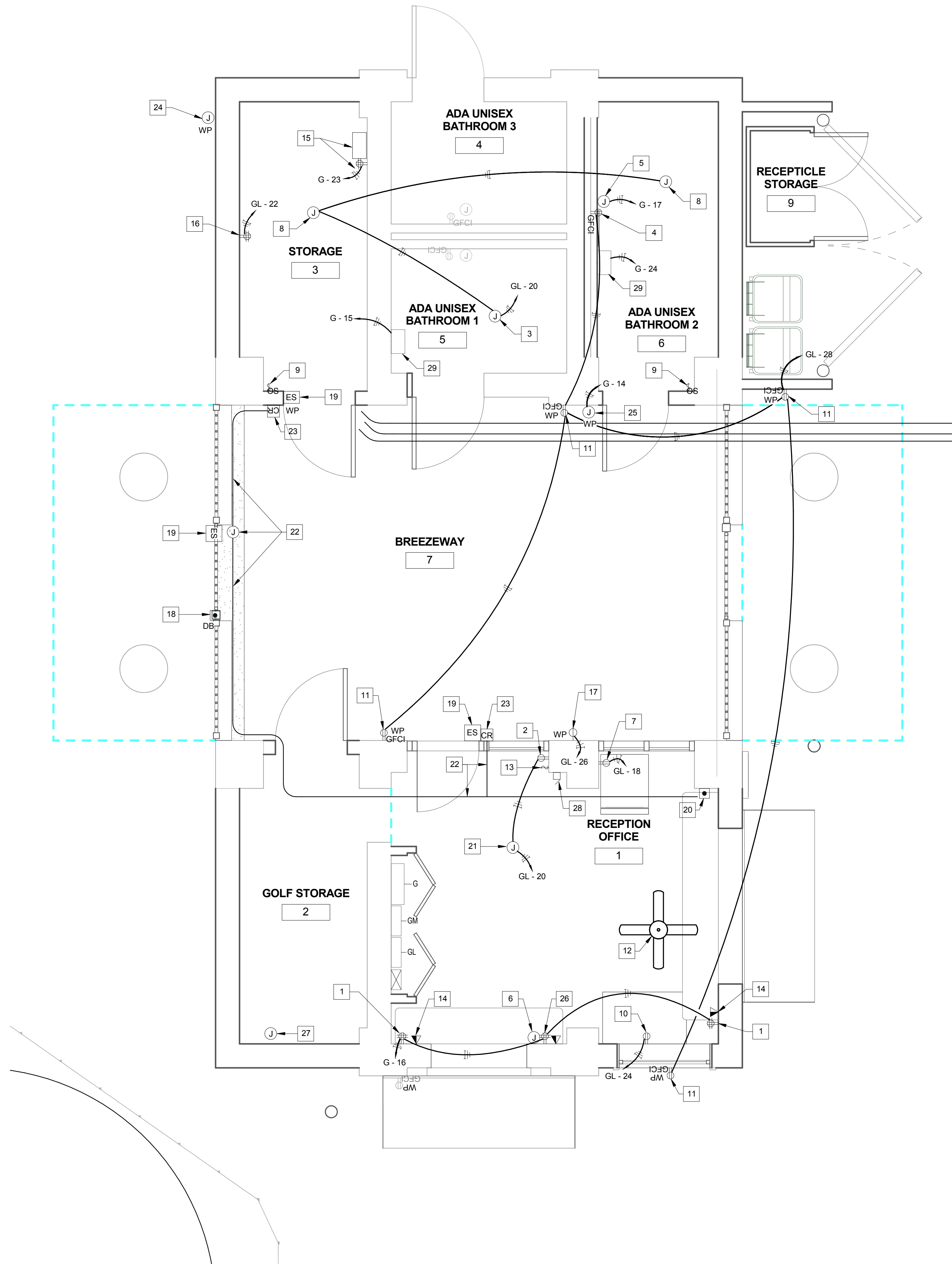
Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1

Drawn By
JO

Checked By
AM

Sheet Number
EDP501



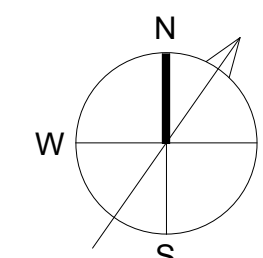
1 ELECTRICAL POWER PLAN
EP101 3/8" = 1'-0"

GENERAL NOTES

1. ALL CONDUITS SHALL BE CONCEALED.
NO CONDUITS SHALL BE EXPOSED.

KEY NOTES #

1. NEW 120V QUADRUPLUX RECEPTACLES.
2. NEW 120V DUPLEX RECEPTACLE.
3. NEW 115V, 1P EXHAUST FAN EF-2 SERVING BATHROOM 1.
4. NEW 120V GFCI DUPLEX RECEPTACLE MOUNTED 42" A.F.F. REUSE EXISTING WIRING AND EXTEND AS NEEDED.
5. NEW 120V, 60Hz INSTANT HOT WATER HEATER.
6. NEW JUNCTION BOX FOR SPEAKER WIRING TO CONTROL UNIT AMPLIFIER WITH MICROPHONE FOR THE NEW PUBLIC ADDRESS SYSTEM MOUNTED 12" ABOVE EQUIPMENT. ALLOW SUFFICIENT ROOM FOR ACCESS. PROVIDE PASS THROUGH FACEPLATE FOR WIRING.
7. NEW 120V DUPLEX RECEPTACLE FOR FREEZER.
8. NEW 115V, 1P EXHAUST FAN EF-1 SERVING NEW STORAGE ROOM (3) AND ADA BATHROOM 2.
9. CONNECT NEW EXHAUST FANS TO LIGHT SWITCH.
10. NEW 120V DUPLEX RECEPTACLE FOR FREEZER.
11. NEW 120V WEATHERPROOF GFCI RECEPTACLES.
12. NEW CEILING MOUNTED FAN. PROVIDE JUNCTION BOX AND ELECTRICAL POWER. TIE INTO GENERAL RECEPTACLE CIRCUIT (GL-20). JUNCTION BOX SHALL BE RATED TO SUPPORT CEILING FAN.
13. NEW SWITCH FOR CEILING FAN.
14. NEW DUAL TELEPHONE AND DATA OUTLET.
15. NEW TELECOMMUNICATIONS CABINET (BY OTHERS). PROVIDE QUADRUPLUX OUTLET TO PROVIDE POWER AS NECESSARY.
16. DEDICATED 120V QUADRUPLUX RECEPTACLE FOR FUTURE IT EQUIPMENT.
17. NEW DEDICATED 120V SIMPLEX RECEPTACLE FOR ICE MACHINE.
18. NEW DOORBELL FOR POOL AREA EXIT MOUNTED ON FRAME OF GATE. DEVICE SHALL BE WEATHERPROOF. PROVIDE NOTIFICATION DEVICE IN RECEPTION OFFICE.
19. NEW ELECTRIC DOOR STRIKE.
20. NEW REMOTE ELECTRIC STRIKE DOOR RELEASE BUTTON MOUNTED 54" A.F.F.
21. NEW 115V, 1P EXHAUST FAN EF-3 IN RECEPTION OFFICE.
22. PROVIDE PULLBOX ABOVE GATE TO RUN WIRING AND CONDUIT TO ALL CARD READERS AND ELECTRIC STRIKES ON THE GATE, STORAGE ROOM, AND THE RECEPTION OFFICE GLASS DOOR. CONDUIT FOR ELECTRIC STRIKES SHALL BE RUN THROUGH DOOR FRAMES.
23. NEW CARD READER. CONNECT CARD READER TO ELECTRIC STRIKE.
24. PROVIDE POWER FOR RELOCATED WATER FOUNTAIN. REUSE EXISTING WIRING AND CIRCUIT. EXTEND WIRING AS NEEDED.
25. PROVIDE POWER FOR NEW 120V WATER COOLER.
26. NEW QUADRUPLUX OUTLET PROVIDED FOR NEW CONTROL UNIT AMPLIFIER.
27. PROVIDE POWER FOR NEW MOTORIZED DAMPER.
28. NEW BUZZER FOR DOORBELL. BUZZER TO BE MOUNTED 8' A.F.F.
29. NEW 120V, 1P, HAND DRYER.



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016
3	REVISION # 3	07/19/2016

Revisions

Drawing Title

ELECTRICAL POWER PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	

Drawn By JO

Checked By AM

Sheet Number

EP101

GENERAL NOTES

1. ALL EXTERIOR AND NEW GOLF BUILDING CONDUIT SHALL BE CONCEALED.
2. PROVIDE RGS FOR 90° ELBOW STUB UP ABOVE GROUND. SEE SHEET E501 FOR DETAILS.

KEY NOTES

1. 16"x16" JUNCTION BOX TO BE MOUNTED AT 10' A.F.F. IN THE ACTIVITIES BUILDING.
2. 16"x16" WEATHERPROOF JUNCTION BOX TO BE MOUNTED OUTSIDE OF THE ACTIVITIES BUILDING. RUN TWO 1" CONDUIT UNDERGROUND FOR IT CABLES AND POWER. JUNCTION BOX AND EXPOSED CONDUIT SHALL BE PAINTED TO MATCH BUILDING.
3. (2) 16"x16" JUNCTION BOXES TO BE MOUNTED ABOVE THE CEILING IN THE GOLF PARK BUILDING. ONE JUNCTION BOX WILL BE USED FOR THE IT CABLES AND THE OTHER WILL BE FOR THE POWER.
4. 10"x10" JUNCTION BOX MOUNTED 12" A.F.F. IN STORAGE ROOM FOR IT CABLES.
5. 10"x10" JUNCTION BOX MOUNTED 12" A.F.F. IN STORAGE ROOM FOR POWER FEEDERS.



Gaithersburg
A CHARACTER COUNTS! CITY

MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

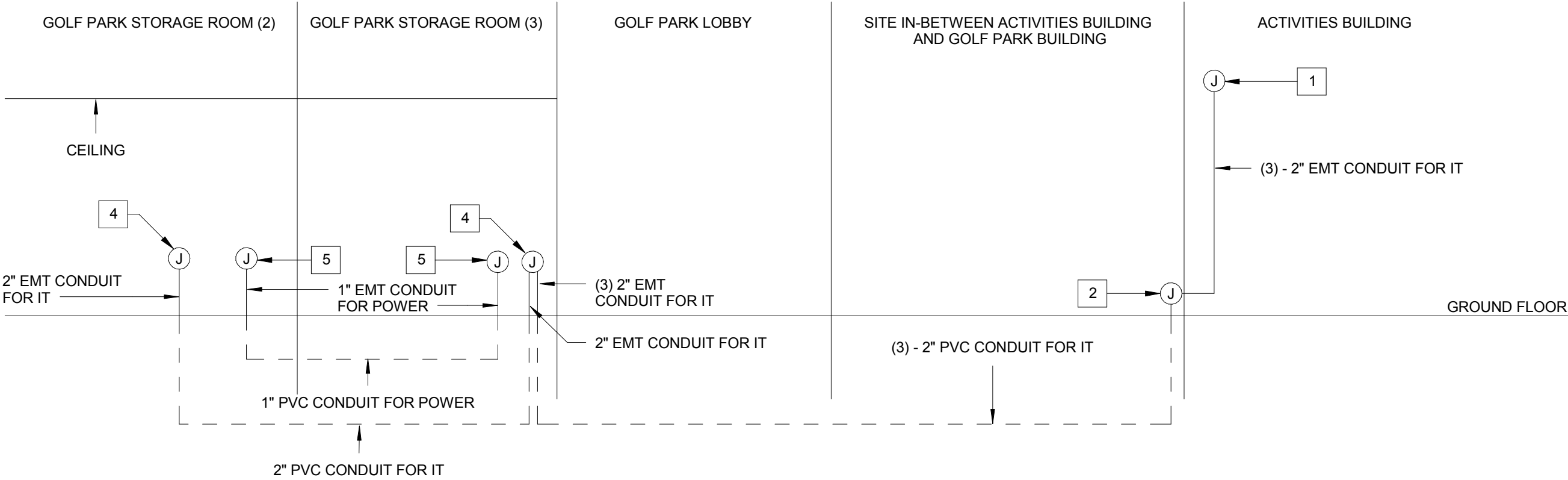
NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016



1
EP501
ELECTRICAL CONDUIT RISER DIAGRAM (IT AND POWER ONLY)
N.T.S.

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Electrical Title
ELECTRICAL CONDUIT RISER
DIAGRAM
(IT AND POWER ONLY)

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	

Drawn By JO	
Checked By AM	
Sheet Number EP501	

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016
3	REVISION # 3	07/19/2016

Revisions

Drawing Title

**ELECTRICAL PANEL
SCHEDULES**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012	Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1

	Drawn By JO
	Checked By AM
	Sheet Number EP601

Branch Panel: G

Location: GOLF OFFICE
Supply From: GM
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: MLO
Mains Rating: 100 A
MCB Rating: 100 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Space	--	--	0 VA	0 VA	0 VA	0 VA	0 VA	0 VA	--	--	Space	2
3	Space	--	--							--	--	Space	4
5	Space	--	--					0 VA	0 VA	--	--	Space	6
7	Space	--	--	0 VA	0 VA					--	--	Space	8
9	Space	--	--			0 VA	0 VA			--	--	Space	10
11	Space	--	--					0 VA	0 VA	--	--	Space	12
13	Space	--	--	0 VA	750 VA					1	15 A	NEW WATER FOUNTAIN	14
15	NEW HAND DRYER (BATHROOM 1)	20 A	1			1500 VA	1080 VA			1	20 A	RECEPTION OFFICE COMPUTERS	16
17	NEW HOT WATER HEATER (BATHROOM 2)	20 A	1					1440 VA	1200 VA	1	20 A	EX LOAD	18
19	EX ICE MACHINE	60 A	2	1040 VA	1200 VA					1	20 A	EX LOAD	20
21	--	--	--			1040 VA	1200 VA			1	20 A	EX LIGHTS	22
23	NEW IT EQUIPMENT	20 A	1					1440 VA	1500 VA	1	20 A	NEW HAND DRYER (BATHROOM 2)	24
25	EX HOT WATER HEATERS	20 A	1	1440 VA	1500 VA					1	20 A	EX HAND DRYER	26
27	EX BATHROOM RECEPTACLES	20 A	1			1500 VA	750 VA			2	20 A	EX DOUBLE HEAD POST LIGHT	28
29	EX RECEPTACLES	20 A	1					1200 VA	750 VA	--	--	--	30
Total Load:				5930 VA		7070 VA		7530 VA					
Total Amps:				49 A		60 A		64 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	15010 VA	100.00%	15010 VA	Total Conn. Load:	20530 VA
Motor	0 VA	0.00%	0 VA	Total Est. Demand:	20530 VA
Largest Motor	0 VA	0.00%	0 VA	Total Conn. Current:	57 A
				Total Est. Demand Current:	57 A

Notes:

Branch Panel: GL

Location: GOLF OFFICE
Supply From: ELECTRICAL SERVICE
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 10kA
Mains Type: MCB
Mains Rating: 200 A
MCB Rating: 225 A

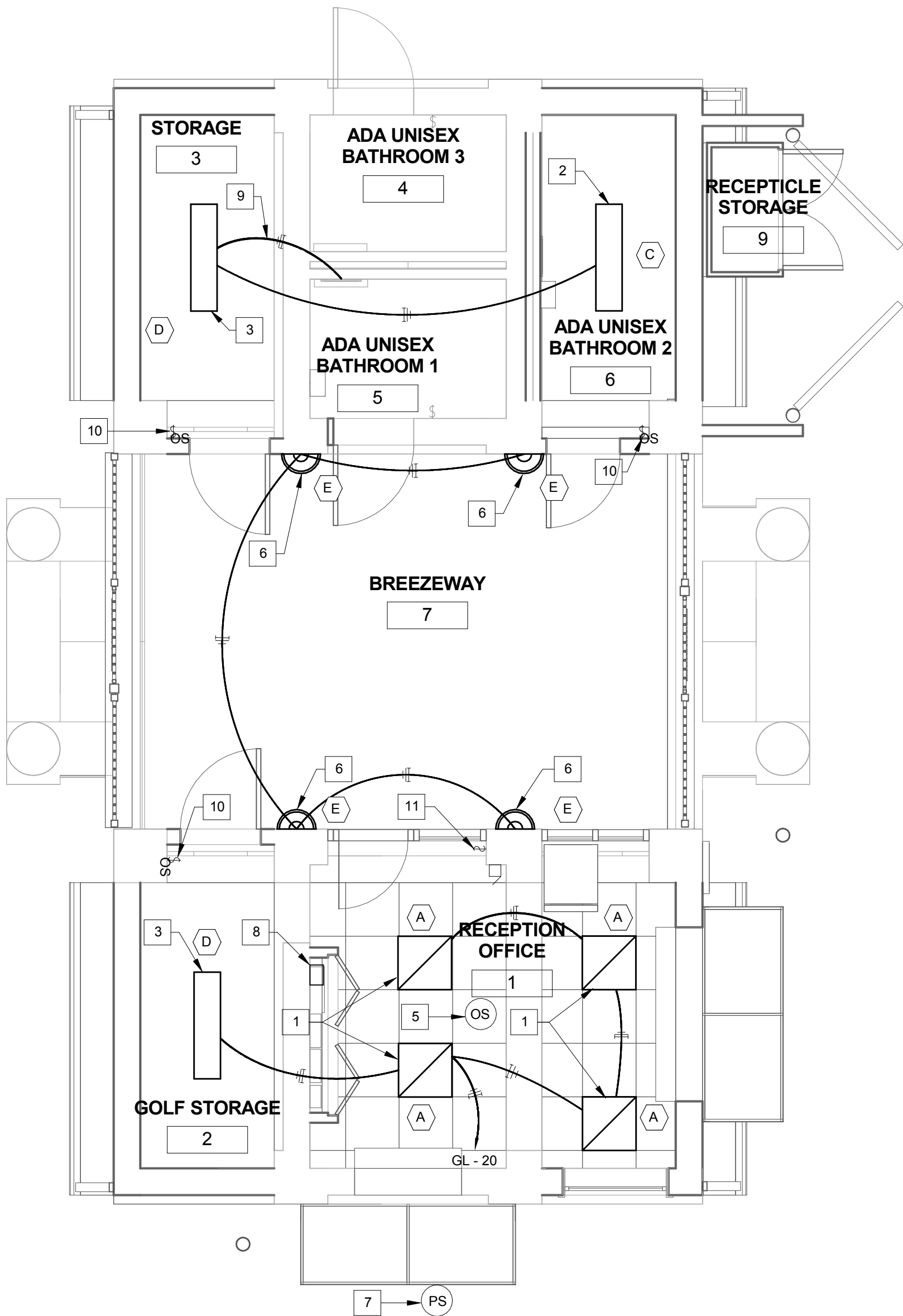
Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EX POND	20 A	3	960 VA	100 VA					1	20 A	EX POND STARTERS	2
3	--	--	--			960 VA	1200 VA			1	20 A	EX SODA MACHINE	4
5	--	--	--					960 VA	1200 VA	1	20 A	EX ISOLATED GRND CASH REGISTER	6
7	EX WATERFALL	40 A	3	3600 VA	1200 VA					1	20 A	EX SODA MACHINE	8
9	--	--	--			3600 VA	600 VA			1	20 A	EX SECURITY LIGHT	10
11	--	--	--					3600 VA	1200 VA	1	20 A	EX LEFT QUAD	12
13	EX POLE 1 / PUTT PRAC	20 A	2	1040 VA	1200 VA					1	20 A	EX LOAD	14
15	--	--	--			1040 VA	1200 VA			1	20 A	EX PLUG ICE CREAM	16
17	EX POLE6 / HOLE 4	20 A	2					1040 VA	1200 VA	1	20 A	NEW FREEZER RECEPTACLE	18
19	--	--	--	1040 VA	1403 VA					1	20 A	NEW OFFICE REC+LGT.CLG FAN, EF-1,2,3	20
21	EX PLANTER GROUND LIGHTS	20 A	1			600 VA	360 VA			1	20 A	NEW IT ROOM RECEPTACLE	22
23	EX WATERFALL GRND LIGHTS & SPIKE...	20 A	1					600 VA	1200 VA	1	20 A	NEW ICE CREAM FREEZER RECEPTACLE	24
25	EX EMERGENCY LIGHTS	20 A	1	600 VA	1200 VA					1	20 A	NEW ICE MACHINE RECEPTACLE	26
27	EX EMERGENCY LIGHTS	20 A	1			600 VA	1680 VA			1	20 A	NEW GFCI RECPTS BATHROOM & OUTDOOR	28
29	EX EMERGENCY LIGHTS	20 A	1					600 VA	1200 VA	1	20 A	EX 10' TIME CLOCK LIGHT POLES	30
Total Load:				12343 VA		11840 VA		12800 VA					
Total Amps:				104 A		99 A		107 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	17141 VA	100.00%	17141 VA	Total Conn. Load:	36996 VA
Motor	2880 VA	100.00%	2880 VA	Total Est. Demand:	36996 VA
Largest Motor	10800 VA	125.00%	13500 VA	Total Conn. Current:	103 A
				Total Est. Demand Current:	110 A

Notes:



1
EL101
ELECTRICAL LIGHTING PLAN
1/4" = 1'-0"

GENERAL NOTES

1. ALL FLUORESCENT FIXTURES AND LAMPS MUST BE RATED TO WITHSTAND TEMPERATURES AT 0° F.
2. TIE LOBBY AND EXTERIOR FIXTURES TO NEW TIMECLOCK AND PHOTOCELL. EXISTING TIMECLOCK AND PHOTOCELL MAY BE REUSED.

KEY NOTES #

1. NEW 120V 2'x2' RECESSED FLUORESCENT PARALOUVER LIGHT FIXTURE.
2. NEW 120V 1'x4' FLUORESCENT LIGHT FIXTURE TO BE INSTALLED IN BATHROOM.
3. NEW 120V 1'x4' LINEAR FLUORESCENT LIGHT FIXTURE TO BE INSTALLED IN STORAGE ROOM.
4. NOT USED.
5. NEW OCCUPANCY SENSOR MOUNTED ON THE CEILING OF THE RECEPTION OFFICE.
6. NEW LED WALL SCONCE LIGHT FIXTURE. REUSE EXISTING WIRING AND CIRCUIT.
7. NEW PHOTO SENSOR LOCATED ON THE WALL AT 14' A.F.F. CONNECT TO THE LOBBY WALL SCONCE AND EXTERIOR LIGHT FIXTURES.
8. NEW TIME CLOCK WITH MANUAL OVERRIDE FOR LIGHTING FIXTURES, COORINDATE LOCATION W/EXISTING ELECTRICAL EQUIPMENT.
9. CONNECT NEW STORAGE ROOM AND BATHROOM LIGHT FIXTURE TO EXISTING BATHROOM LIGHT CIRCUIT.
10. NEW LIGHT SWITCH WITH OCCUPANCY SENSOR.



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

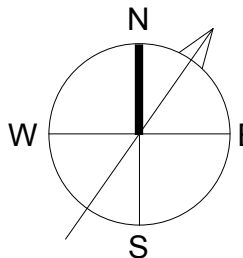
Drawing Title

ELECTRICAL LIGHTING PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By JO	Sheet Number EL101
Checked By AM	



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

ELECTRICAL LUMINARES
SCHEDULE

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012	Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1

	Drawn By JO
	Checked By AM
	Sheet Number EL501

LUMINARIES SCHEDULE

TYPE	FIXTURE TYPE	MOUNTING	MOUNTING HEIGHT (A.F.F.)	VOLTS	LAMP DATA					CATALOG NO.	NOTES
					NOMINAL WATTS	TOTAL WATTS	LAMPS	TYPE	MANUFACTURER		
A	2'X2' RECESSED PARALOUVER	CEILING RECESSED	9'-0"	UNV	14	28	2	FLUOR	PHILIPS LIGHTING	2ESG214-23FMW-UNIV1/2	
B	LED FLOOD LIGHT	POLE MOUNTED & WALL MOUNTED	SEE NOTES	UNV	52	52	1	LED	PHILIPS LIGHTING	CSFS32L530NWG1SFSPUNIV	FIXTURE ON THE NORTH EAST SIDE OF THE BUILDING (TOWARDS ACTIVITIES BUILDING) SHALL BE MOUNTED AT 15'. FIXTURE ON THE SOUTH EAST SIDE OF THE BUILDING (TOWARDS GOLF COURSE) SHALL BE MOUNTED AT 12'.
C	1'x4' CEILING MOUNTED LIGHT	CEILING MOUNTED	9'-0"	UNV	32	64	2	FLUOR	PHILIPS LIGHTING	1SPF232-FS01-UNIV	
D	4' SURFACE MOUNTED STRIP LIGHT	CEILING & WALL SURFACE	9'-0"	UNV	31	61	2	FLUOR	PHILIPS LIGHTING	HDS232-UNV-LT	
E	LED WALL SCONCE	WALL SURFACE	8'-0"	UNV	35	35	1	LED	PHILIPS LIGHTING	106L-3-35LA-NW-UNIV-NP	



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ADA BATHROOM	+	24.7 fc	31.3 fc	14.9 fc	2.1:1	1.7:1
LOBBY	+	8.2 fc	10.6 fc	4.4 fc	2.4:1	1.9:1
RECEPTION OFFICE	+	22.9 fc	26.5 fc	16.7 fc	1.6:1	1.4:1
STORAGE (2)	+	22.4 fc	26.7 fc	14.8 fc	1.8:1	1.5:1
STORAGE (3)	+	22.1 fc	27.0 fc	14.1 fc	1.9:1	1.6:1



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877



NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

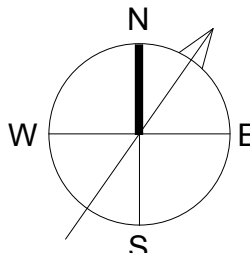
Revisions

Drawing Title
LIGHTING CALCULATIONS - INTERIOR

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	

Drawn By JO
Checked By AM
Sheet Number EL601



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

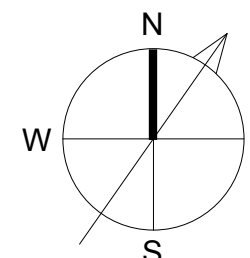
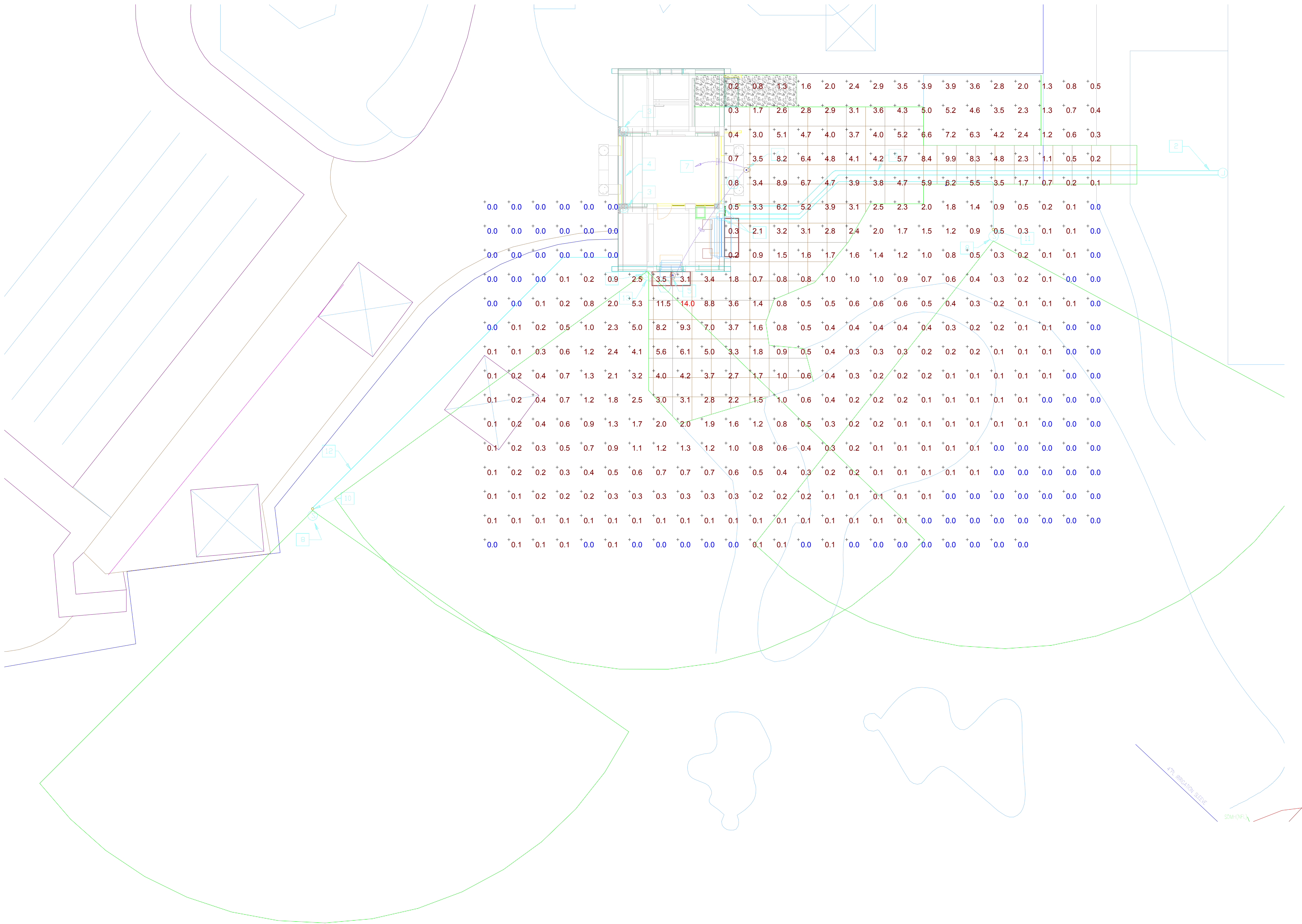
Drawing Title
**LIGHTING CALCULATIONS -
SITE**

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By JO
Checked By AM
Sheet Number EL602

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE LIGHTING CALC	+	1.3 fc	14.0 fc	0.0 fc	N/A	N/A



GENERAL NOTES

1. ALL CONDUIT SHALL BE CONCEALED.



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

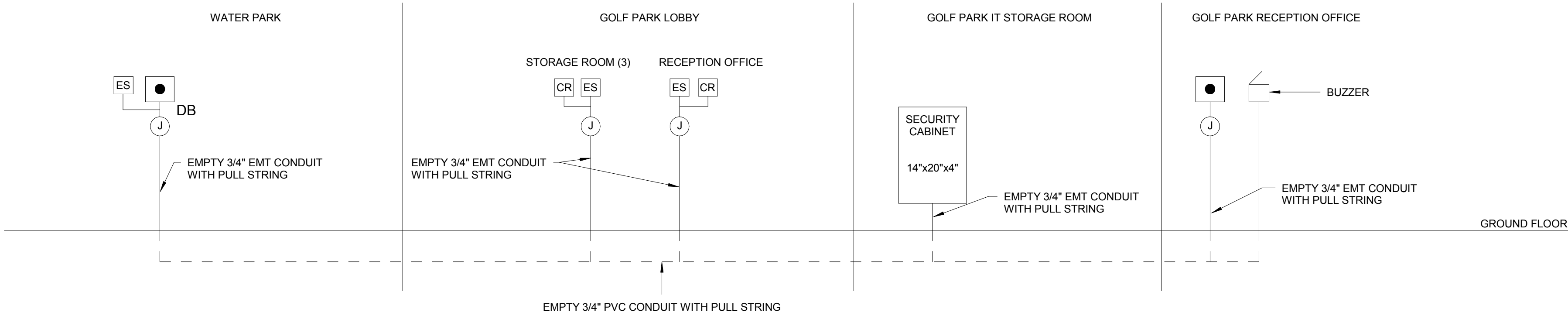


NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016



1 SECURITY RISER DIAGRAM
EY501 N.T.S.

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016
3	REVISION # 3	07/19/2016

Revisions

Drawing Title

SECURITY RISER DIAGRAM

Phase

☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number
12-0009.012

Drawing Scale: AS NOTED

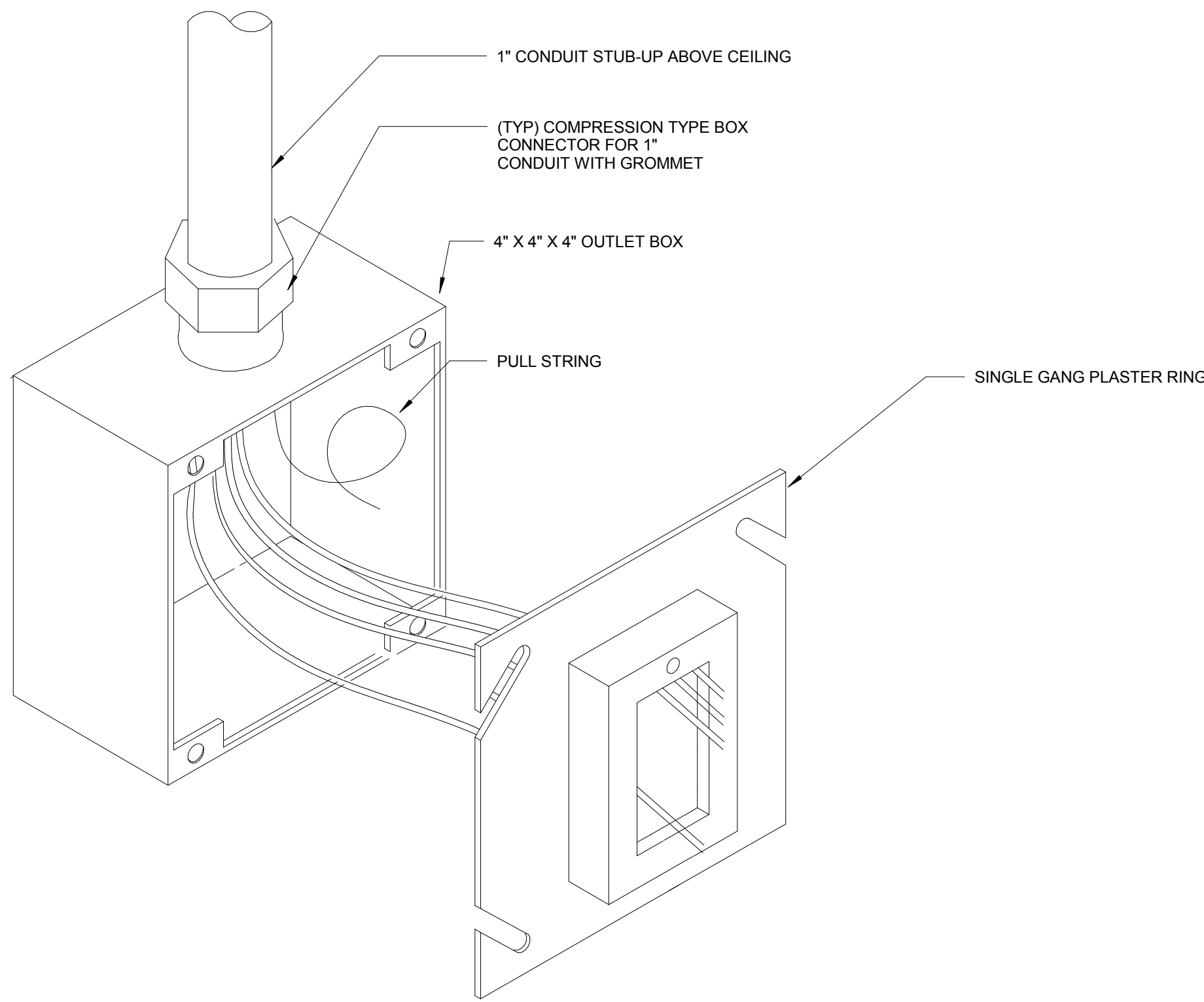
Date
06.30.2016

CADD Filename
Revit Model
CADD Plot Scale
1:1

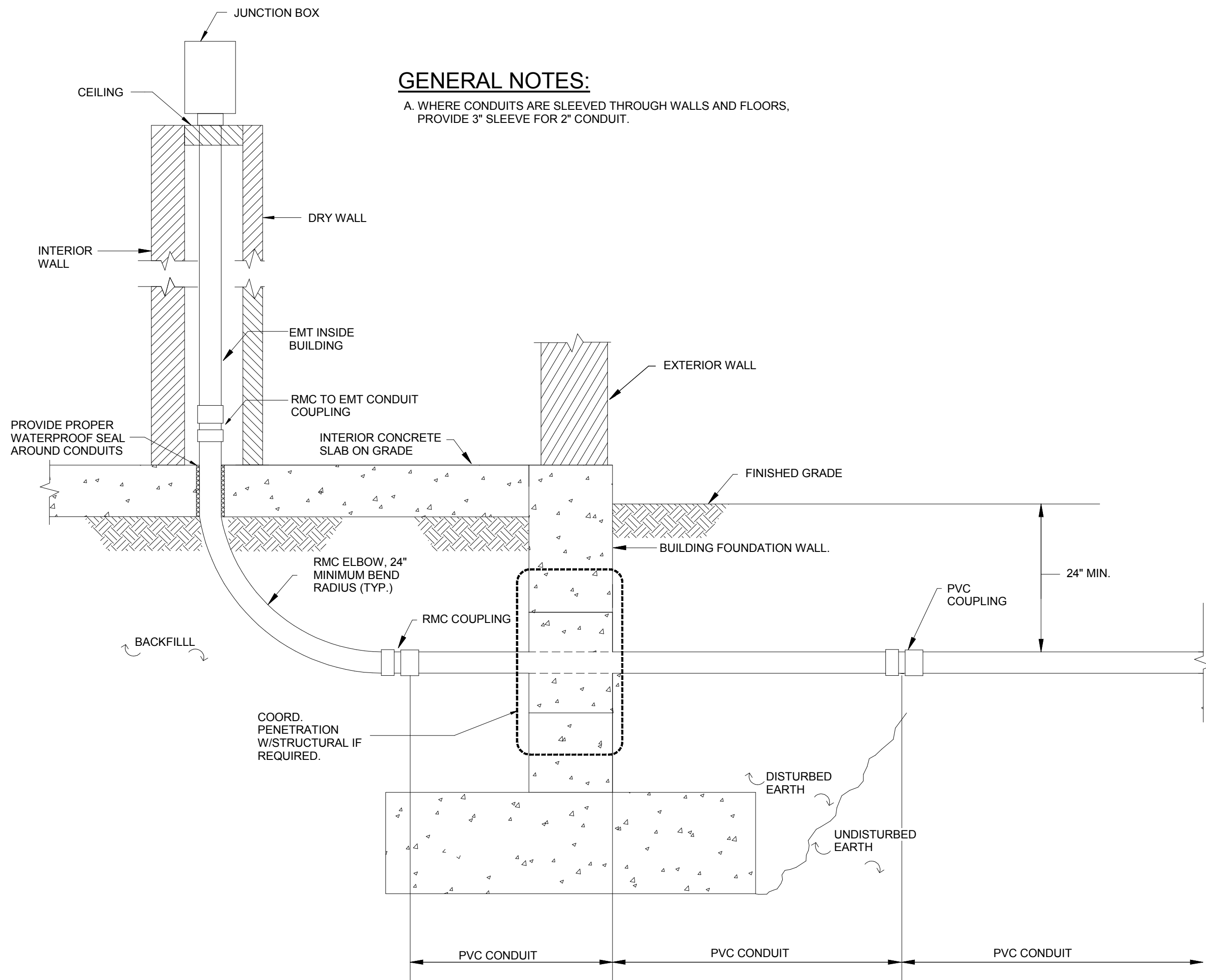
Drawn By
JO

Checked By
AM

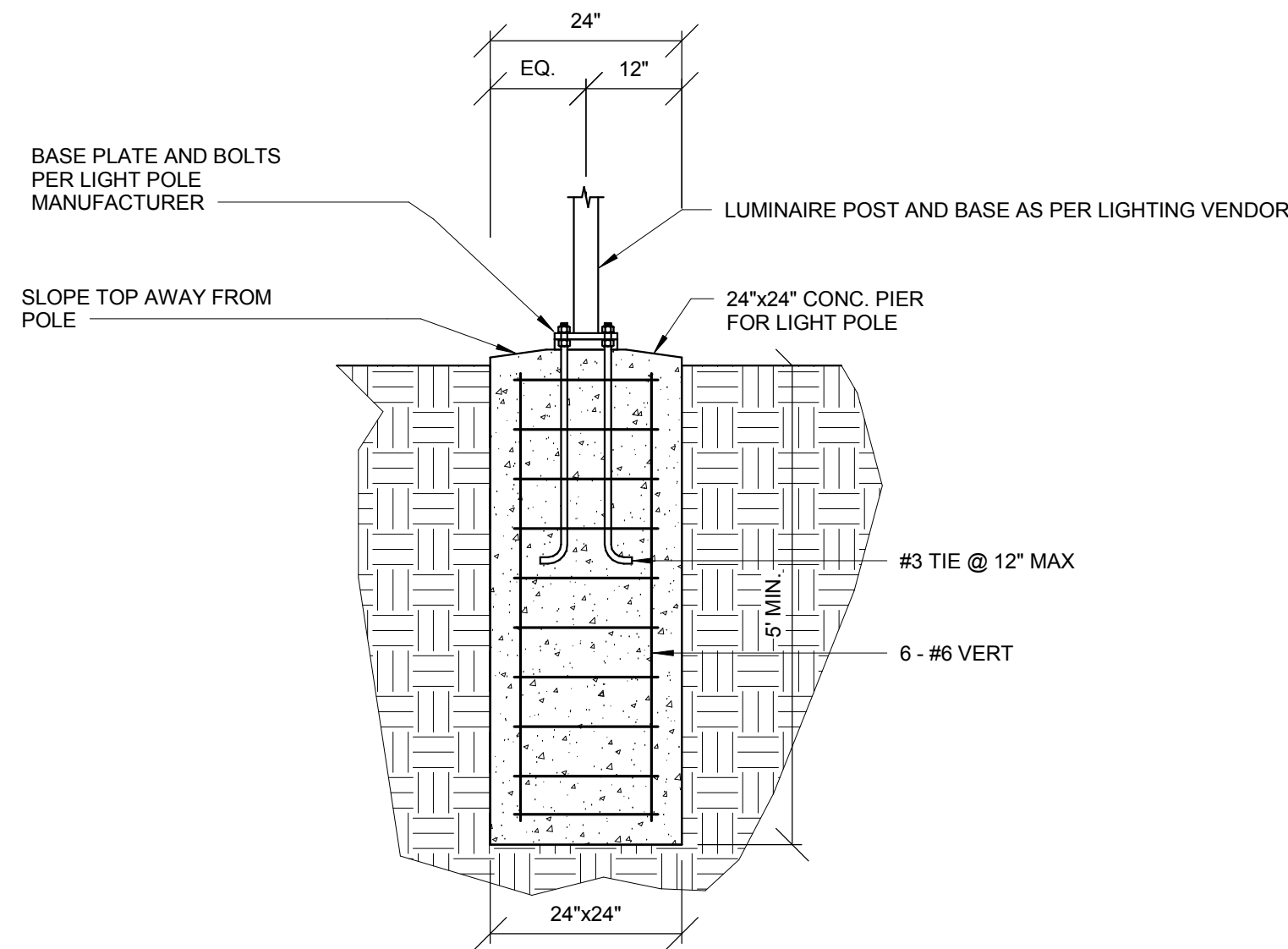
Sheet Number
EY501



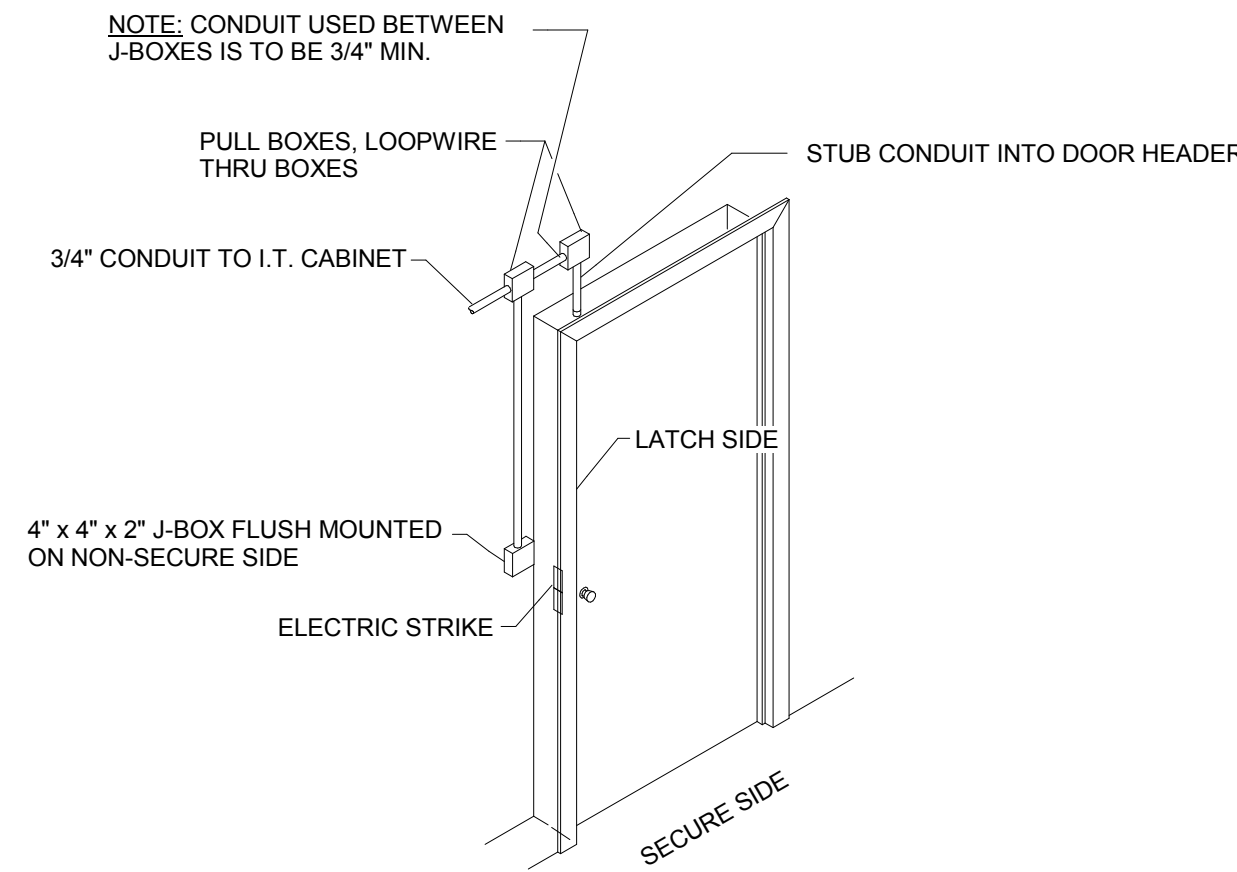
1 VOICE-DATA OUTLET
E501 N.T.S.



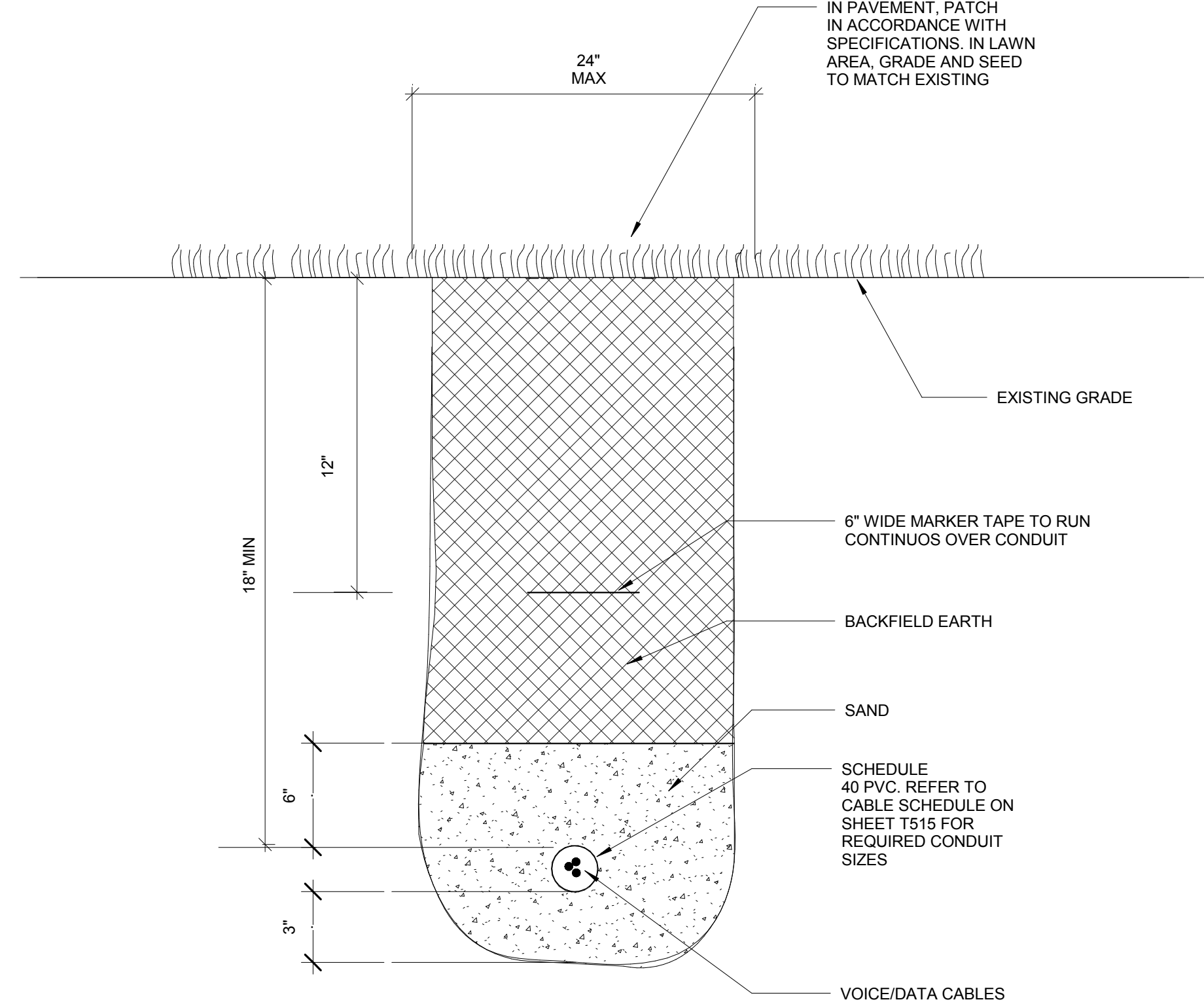
4 TYPICAL CONDUIT ENTRY INTO BUILDING DETAIL
E501 N.T.S.



2 LUMINAIRE AND SPEAKER POST BASE DETAIL
E501 N.T.S.



3 DOOR ELECTRIC STRIKE AND CARD READER CONDUIT DETAIL
E501 N.T.S.



5 UNDERGROUND TRENCH DETAIL
E501 N.T.S.

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am duly licensed professional engineer under the laws of the State of Maryland.

License No. 45772
Expiration Date: 07.28.2016

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

ELECTRICAL DETAILS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

A/E Project Number: 12-0009.012
Drawing Scale: AS NOTED

Date: 06.30.2016
CADD Filename: Revit Model
CADD Plot Scale: 1:1

Drawn By: JO

Checked By: AM

Sheet Number

E501

PIPING SYMBOLS		ABBREVIATIONS		GENERAL SYMBOLS		PLUMBING GENERAL NOTES:	
<div><div><div><div></div></div><div>CW</div></div><div>NEW DOMESTIC COLD WATER (CW)</div></div> <div><div><div><div></div></div><div>HW</div></div><div>NEW DOMESTIC HOT WATER (HW)</div></div> <div><div><div><div></div></div><div>HWR</div></div><div>NEW DOMESTIC HOT WATER RETURN (HWR)</div></div> <div><div><div><div></div></div><div></div></div><div>NEW SANITARY PIPE (SAN)</div></div> <div><div><div><div></div></div><div></div></div><div>NEW VENT PIPE (V)</div></div> <div><div><div><div></div></div><div>G</div></div><div>NEW NATURAL GAS PIPE</div></div> <div><div><div><div></div></div><div>P</div></div><div>PROPANE GAS PIPE</div></div> <div><div><div><div></div></div><div>O</div></div><div>FUEL OIL PIPE</div></div> <div><div><div><div></div></div><div>TP</div></div><div>TRAP PRIMER PIPE</div></div> <div><div><div><div></div></div><div></div></div><div>NEW SHUT-OFF VALVE</div></div> <div><div><div><div></div></div><div></div></div><div>DEMOLITION PIPE</div></div> <div><div><div><div></div></div><div>CW</div></div><div>EXISTING DOMESTIC COLD WATER (CW)</div></div> <div><div><div><div></div></div><div>HW</div></div><div>EXISTING DOMESTIC HOT WATER (HW)</div></div> <div><div><div><div></div></div><div>HWR</div></div><div>EXISTING DOMESTIC HOT WATER RETURN (HWR)</div></div> <div><div><div><div></div></div><div></div></div><div>NEW SANITARY PIPE (SAN)</div></div> <div><div><div><div></div></div><div></div></div><div>NEW VENT PIPE (V)</div></div> <div><div><div><div></div></div><div></div></div><div>EXISTING SHUT-OFF VALVE</div></div>		<div><div><div><div>AP</div><div>ACCESS PANEL</div></div><div><div>ABV</div><div>ABOVE</div></div><div><div>AFF</div><div>ABOVE FINISH FLOOR</div></div><div><div>BEL</div><div>BELOW</div></div><div><div>BFPR</div><div>BACKFLOW PREVENTER</div></div><div><div>BV</div><div>BALANCING VALVE</div></div><div><div>CLG</div><div>CEILING</div></div><div><div>CO</div><div>CLEANOUT</div></div><div><div>(E)</div><div>EXISTING</div></div><div><div>FCO</div><div>FLOOR CLEANOUT</div></div><div><div>FD</div><div>FLOOR DRAIN</div></div><div><div>DHWT</div><div>DOMESTIC HOT WATER TANK</div></div><div><div>HB</div><div>HOSE BIBB</div></div><div><div>OHB</div><div>OPEN HUB DRAIN</div></div><div><div>SP</div><div>SOIL PIPE</div></div><div><div>SS</div><div>SOIL STACK</div></div><div><div>TP</div><div>TRAP PRIMER</div></div><div><div>V</div><div>VENT</div></div><div><div>VIF</div><div>VERIFY IN FIELD</div></div><div><div>VS</div><div>VENT STACK</div></div><div><div>VTR</div><div>VENT THRU ROOF</div></div><div><div>NG</div><div>NATURAL GAS PIPE</div></div><div><div>LP</div><div>LIQUID PROPANE PIPE</div></div></div></div>	<div><div><div><div></div></div><div>CONNECT NEW TO EXISTING</div></div><div><div><div><div></div></div><div>POINT OF DISCONNECT</div></div><div><div><div><div></div></div><div>ELBOW DOWN</div></div><div><div><div><div></div></div><div>ELBOW UP</div></div><div><div><div><div></div></div><div>TOP CONNECTION, 45° OR 90°</div></div><div><div><div><div></div></div><div>SHUT OFF VALVE</div></div><div><div><div><div></div></div><div>GAS SHUT OFF VALVE</div></div><div><div><div><div></div></div><div>BOTTOM CONNECTION, 45° OR 90°</div></div><div><div><div><div></div></div><div>SIDE CONNECTION</div></div><div><div><div><div></div></div><div>RISE OR DROP IN PIPE</div></div><div><div><div><div></div></div><div>UNION</div></div><div><div><div><div></div></div><div>CHECK VALVE</div></div><div><div><div><div></div></div><div>BALANCING VALVE</div></div><div><div><div><div></div></div><div>HOSE BIBB</div></div><div><div><div><div></div></div><div>WALL HYDRANT</div></div><div><div><div><div></div></div><div>BACKFLOW PREVENTER</div></div><div><div><div><div></div></div><div>TRAP PRIMER</div></div><div><div><div><div></div></div><div>SHOCK ARRESTOR</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>	<div>1. CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE SITE AND VERIFYING ALL EXISTING FIELD CONDITIONS PRIOR TO SUBMISSION OF HIS BID.</div> <div>2. CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF ALL OTHER TRADES AND MAKING ANY NECESSARY MODIFICATIONS TO HIS WORK AT NO ADDITIONAL COST, INCLUDING ALL OFFSETS.</div> <div>3. CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OF ANY EXISTING MINOR INTERFERENCE'S, INCLUDING CONDUIT, HANGERS, ETC., AT NO ADDITIONAL COST.</div> <div>4. CONTRACTOR SHALL REMOVE EXISTING EQUIPMENT AND MATERIALS PERTAINING TO HIS CONTRACT AS SPECIFIED OR AS REQUIRED WHETHER SHOWN ON THE DRAWINGS OR NOT, TO PREPARE FOR THE NEW WORK.</div> <div>5. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL CODES. THESE CODES SHALL BE FOLLOWED AS MINIMUM PROVIDING HIGHER GRADES OF MATERIAL AND WORKMANSHIP WHERE REQUIRED BY THESE DOCUMENTS. PROVIDE ALL TESTS REQUIRED BY LOCAL CODES.</div> <div>6. CITY OF GAITHERSBURG WILL REIMBURSE ALL PERMITTING FEES TO THE CONTRACTOR.</div> <div>7. SUBMIT ASSEMBLED PRINTED INSTRUCTIONS FOR THE OPERATION AND MAINTENANCE OF EACH ITEM INSTALLED ALONG WITH EQUIPMENT CUTS AND CONTROL WIRING DIAGRAMS.</div> <div>8. SUBMIT COORDINATED SHOP DRAWINGS FOR REVIEW. THE SHOP DRAWINGS SHALL INDICATE WORK OF OTHER TRADES AND MUST BE SUBMITTED PRIOR TO FABRICATION AND INSTALLATION.</div> <div>9. SUBMIT EQUIPMENT SPECIFICATIONS FOR REVIEW BEFORE PURCHASE.</div> <div>10. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIAL FOR ONE YEAR AFTER COMPLETION AGAINST ALL DEFECTS OF MATERIAL, EQUIPMENT AND WORKMANSHIP.</div> <div>11. PROVIDE COMPETENT OPERATING TECHNICIAN TO INSTRUCT THE OWNER IN THE OPERATION AND MAINTENANCE OF THE INSTALLED EQUIPMENT.</div> <div>12. PROVIDE ACCESS PANELS FOR ALL VALVES OR ANY PIECE OF EQUIPMENT WHEN NECESSARY TO LOCATE ABOVE NON-ACCESSIBLE CEILINGS. SUBJECT TO THE APPROVAL OF THE ARCHITECT. NO EQUIPMENT SHALL BE LOCATED DIRECTLY ABOVE WALLS.</div> <div>13. PROVIDE ALL HOLES, SLEEVES AND CAULKING FOR INSTALLATION OF THIS WORK. CAULKING TO CONFORM TO FIRE RATING OF WALLS.</div> <div>14. PIPING SHALL BE ABOVE CEILING AND CLEAR ANY EXISTING PIPING, LIGHTING FIXTURES, DUCTS, ETC.</div> <div>15. RUN NEW WASTE PIPES AS CLOSE AS POSSIBLE TO UNDERSIDE OF FLOOR SLAB AND VENT PIPING AS CLOSE AS POSSIBLE TO SLAB ABOVE.</div> <div>16. CONTRACTOR SHALL SUBMIT SKETCH TO THE STRUCTURAL ENGINEER FOR APPROVAL, PRIOR TO MAKING REQUIRED BEAM PENETRATIONS.</div> <div>17. DISRUPTION OF ANY EXISTING SERVICE SHALL BE COORDINATED WITH THE OWNER AND SHALL BE PERFORMED AT A TIME AND MANNER SO AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE.</div> <div>18. FOR EXACT LOCATION OF PLUMBING FIXTURES, REFER TO ARCHITECTURAL PLANS AND ELEVATIONS.</div> <div>19. SIZES AND ROUTING OF EXISTING PIPING ARE BASED ON AS-BUILT DRAWINGS PROVIDES BY CITY OF GAITHERSBURG. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND SHALL REPORT CONSISTENCY TO AE PRIOR TO START OF WORK.</div> <div>20. CONTRACTOR SHALL LOCATE NEW SANITARY (2%SLOPE) AND VENT PIPING TO GREASE INTERCEPTOR TO ENSURE THAT THE INVERT OF EXISTING PIPING (THAT NEED TO BE CONNECTED) ARE MAINTAINED.</div>			
		GENERAL CIVIL NOTES:					
		<div>1. LOCATIONS OF EXISTING PIPING SHOWN ARE APPROXIMATE AND TAKEN FROM AVAILABLE RECORDS. CONTRACTOR IS RESPONSIBLE FOR LOCATING/FIELD VERIFYING ALL UTILITES IN PROJECT AREA SHOWN ON DRAWINGS, PRIOR TO ANY EXCAVATION.</div> <div>2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES.</div> <div>3. CONTRACTOR SHALL CONTACT ALL LOCAL UTILITY AUTHORITIES AS REQUIRED, AT LEAST 48 HOURS PRIOR TO EXCAVATIONS.</div> <div>4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY DETECTION EQUIPMENTS OR TEST PITTING AS REQUIRED, TO DETERMINE EXACT LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION ACTIVITIES.</div> <div>5. WHEN WORKING AROUND EXISTING BUILDING/STRUCTURE, CONTRACTOR NEEDS TO TAKE EXTREEM CARE TO PROTECT IT. ANY DAMAGES SHALL BE REPAIRED, REPLACED, OR RESTORED TO THE SATISFACTION OF TH EOWNER AND SHALL NOT RESULT IN ANY EXTRA COST TO OWNER.</div> <div>6. CONTRACTOR SHALL BE REQUIRED TO RESTORE ALL APVEMENTS, CURBS, GUTTERS, SIDEWALKS, AND PAVEMENT TO THEIR ORIGINAL PRE-CONSTRUCITON CONDITION FOR ALL DISTURBED AREAS.</div> <div>7. UPON COMPLETION OF WORK EVERYDAY, CONTRACTOR SHALL REMOVE DIRT, ASPHALT AN DSWWEP ALL AREAS OF PAVEMENT AND LEAVE THE SITE IN A NEAT AND CLEAN CONDITION. HE/SHE SHALL LEAGLly DISPOSE IF DEMOLISHED DEBRIS OFF OWNER'S PROPERTY.</div> <div>8. CONTRACTOR SHALL COORDINATE CONSTRUCTION SCHEDULE AND TRAFFIC CONTROL PLAN WITH OWNER IN ORDER TO MAINTAIN ACCESS TO EXISTING FACILITIES.</div> <div>9. CONTRACTOR SHALL PROVIDE TRAFFICE CONTROL MEASURES (VEHICULAR AND PEDESTRIAN) IN ACCORDANCE WIT HTH EMANUAL ON UNIFORM TRAFFIC CONTROL DECIES (MUTCD), TH EOWNER AND AGENCIES HAVING JURISDICTION WHILE WORKING ON SIDEWALKS AND PARKING LOT.</div>					
				EXAMINATION OF EXISTING CONDITIONS:			
				<div>1. PRIOR TO BID VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE PRESENT BUILDING AFFECTED BY THIS WORK SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL ATTEND THE EXECUTION OF THE WORK BEFORE SUBMITTING PROPOSALS.</div> <div>2. SUBMISSION OF A PROPOSAL WILL BE CONSTRUCTED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE DIFFICULTIES ENCOUNTERED, WHICH COULD, HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION HAD BEEN MADE, WILL NOT BE RECOGNIZED.</div>			
				CONNECTION TO EXISTING WORK:			
				<div>1. PLAN INSTALLATION OF NEW WORK AND CONNECTIONS TO EXISTING WORK TO INSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING FACILITIES.</div> <div>2. SUBMIT TO THE OWNER FOR APPROVAL, DATE SCHEDULE OF NECESSARY TEMPORARY SHUT-DOWN OF EXISTING SERVICES. ALL SHUT-DOWNS SHALL BE MADE AT SUCH TIMES AS WILL NOT INTERFERE WITH REGULAR OPERATING OF EXISTING FACILITIES AND ONLY AFTER WRITTEN APPROVAL OF OWNER.</div> <div>3. TO INSURE CONTINUOUS OPERATION, MAKE NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK.</div> <div>4. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER. RESTORE EXISTING WORK DISTURBED TO ORIGINAL CONDITION.</div>			

Gaithersburg

A CHARACTER COUNTS! CITY

MINIATURE GOLF PARK OFFICE BUILDING RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

451 HUNGERFORD DRIVE
4TH FLOOR
ROCKVILLE, MD 20850

(P)301.770.3520
(F)301.770.3521
www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

GENERAL NOTES, PLUMBING ABBREVIATIONS & SYMBOLS

Phase

☐ CONCEPT ☐ 35% ☐ 60% ☐ 80% ☒ 100%

AE Project Number
12-0009.012

Date
06.30.2016

Drawing Scale: AS NOTED

CADD Filename
Revit Model

CADD Plot Scale
1:1

Drawn By
RP

Checked By
AK

Sheet Number
P001

STATE OF MARYLAND

KLOK KUMAR

No. 24152

PROFESSIONAL ENGINEER

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017


No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

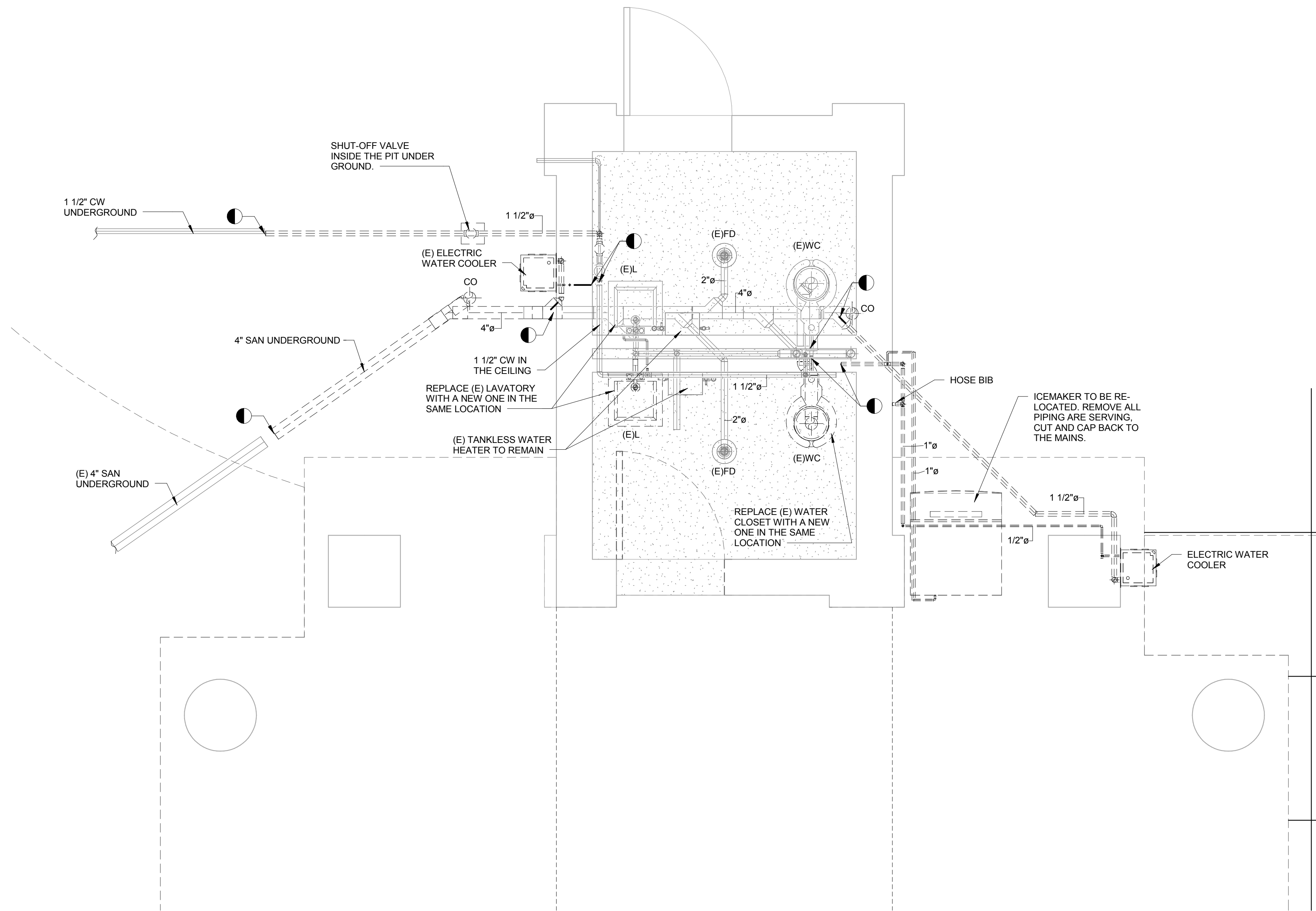
Revisions

Drawing Title
**PLUMBING FLOOR
PLAN-DEMOLITION**

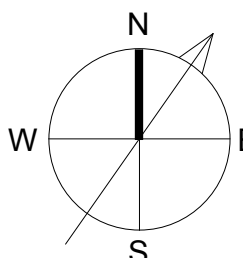
Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

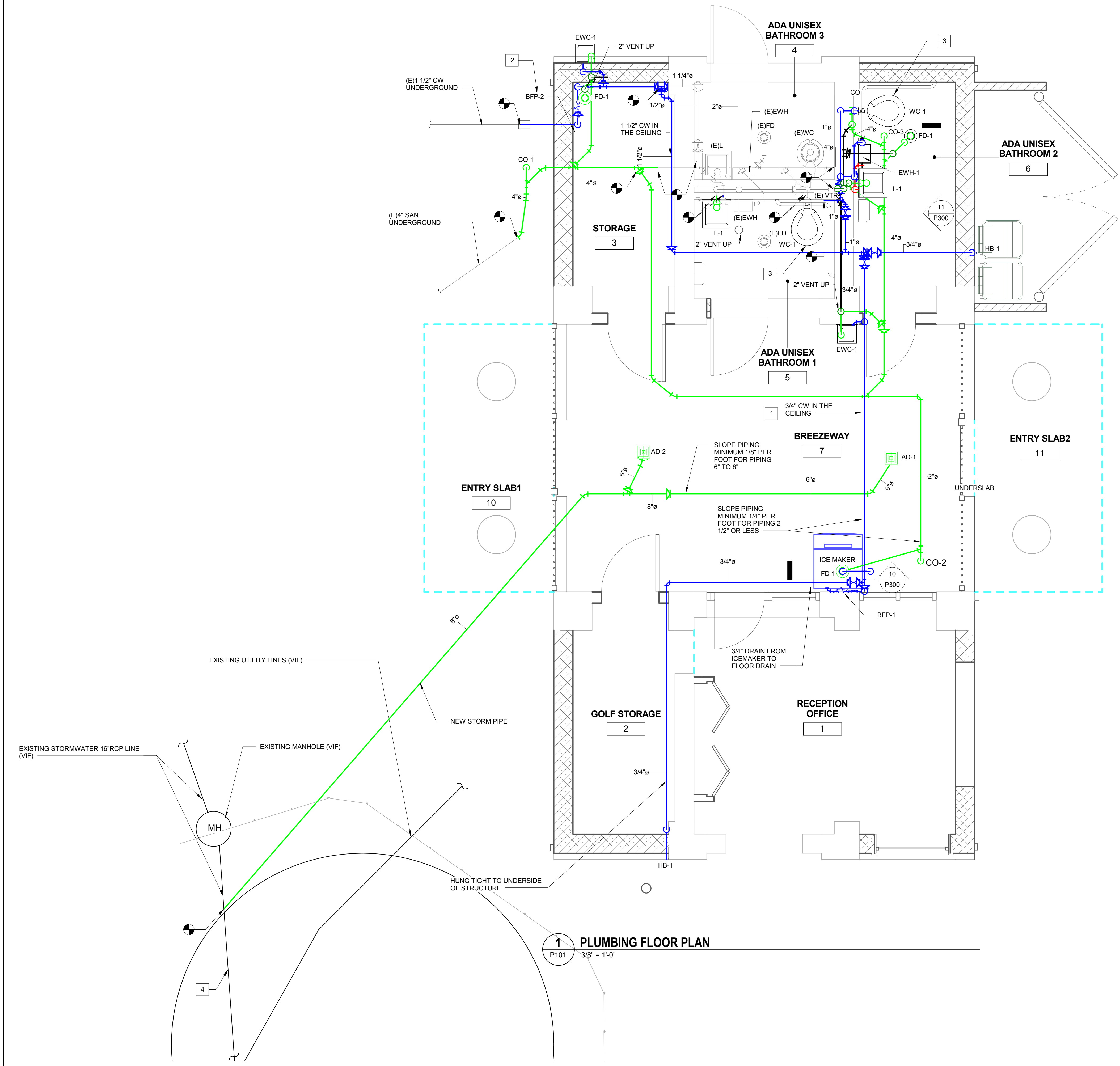
AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model CADD Plot Scale 1:1

	Drawn By RP
	Checked By AK
	Sheet Number P100



1 PLUMBING FLOOR PLAN-DEMOLITION
P100 1/2" = 1'-0"






1 PLUMBING FLOOR PLAN
3/8" = 1'-0"

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY MATERIALS OF ALL EXISTING UNDERGROUND SANITARY AND STORM PIPING PRIOR TO BID TO ENSURE NO CHANGE ORDER AFTER PROJECT AWARD. REFER TO SPECS FOR ACCEPTABLE PIPING MATERIALS.
2. ALL PLUMBING FIXTURES AND PIPING SHALL BE SELECTED AND SUBMITTED TO AE FOR APPROVAL ONLY AFTER THEY HAVE BEEN APPROVED FOR BY COG. ALLOW ENOUGH TIME FOR THIS COORDINATION WITH COG.

DRAWING KEY NOTES #

1. PROVIDE INSULATED PIPING WASJ HUNG TIGHT TO STRUCTURE
2. PROVIDE ACCESSIBLE SHUT-OFF VALVE AND BFP ABOVE FLOOR. REFER TO DETAIL.
3. PROVIDE NEW WATER CLOSET AND ASSOCIATED PIPING. CONNECT NEW SAN, CW AND VENT TO EXISTING PIPING IN CHASE WALL.
4. FIELD VERIFY SIZE AND MATERIAL OF EXISTING PIPING



Gaithersburg
A CHARACTER COUNTS! CITY

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions


Drawing Title

PLUMBING FLOOR PLAN

Phase

☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012		Drawing Scale: AS NOTED	
Date 06.30.2016	CADD Filename Revit Model	CADD Plot Scale 1:1	
Drawn By AR	Checked By AK	Sheet Number P101	





514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152,
Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

SANITARY RISER DIAGRAM

Phase

☐ CONCEPT ☐ 35% ☐ 60% ☐ 80% ☒ 100%


A/E Project Number 12-0009.012	Drawing Scale: AS NOTED
-----------------------------------	-------------------------

Date	CADD Filename	CADD Plot Scale
06.30.2016	Revit Model	1:1

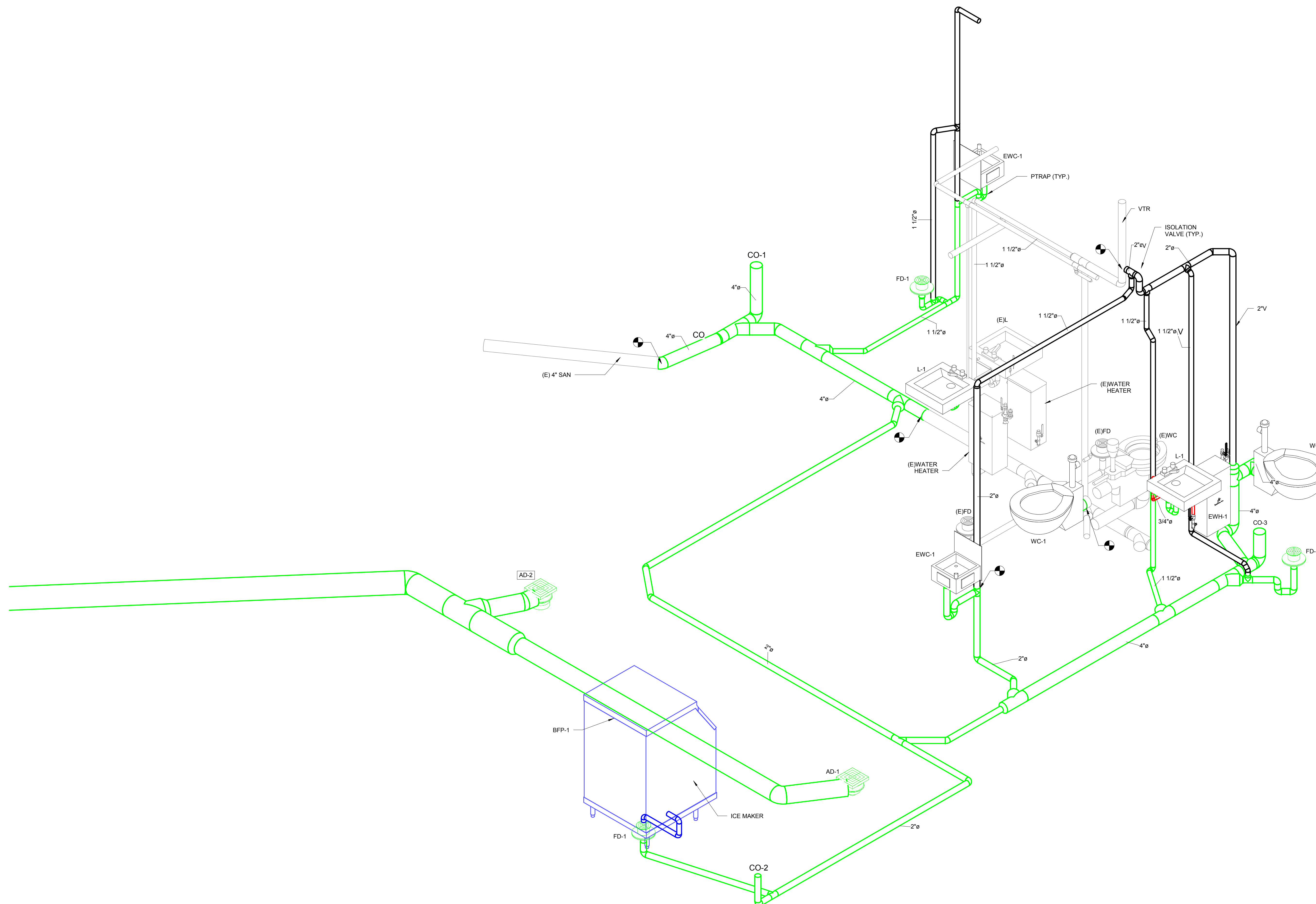
	Drawn By AR
---	--------------------

STATE OF PENNSYLVANIA ALOK KUMAR	Checked By AK
-------------------------------------	----------------------

Sheet Number


P200

Professional Engineer Seal: No. 24152, PROFESSIONAL ENGINEER



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

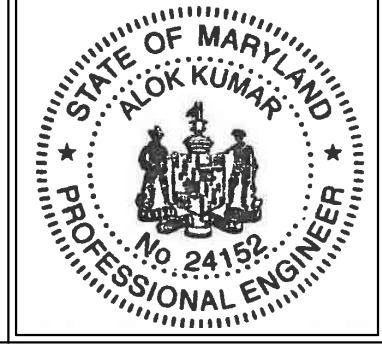
No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

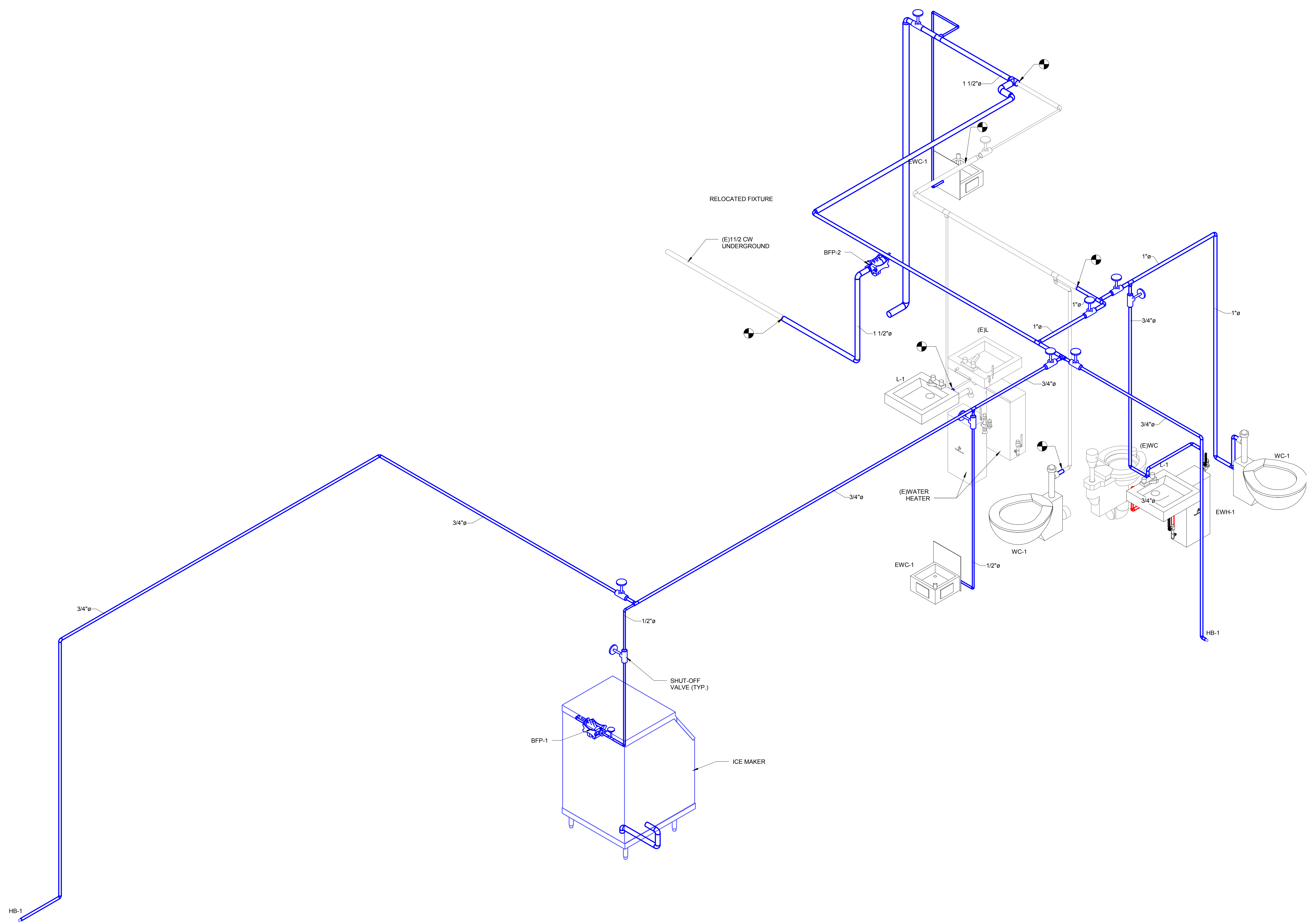
Drawing Title
DOMESTIC WATER RISER DIAGRAM

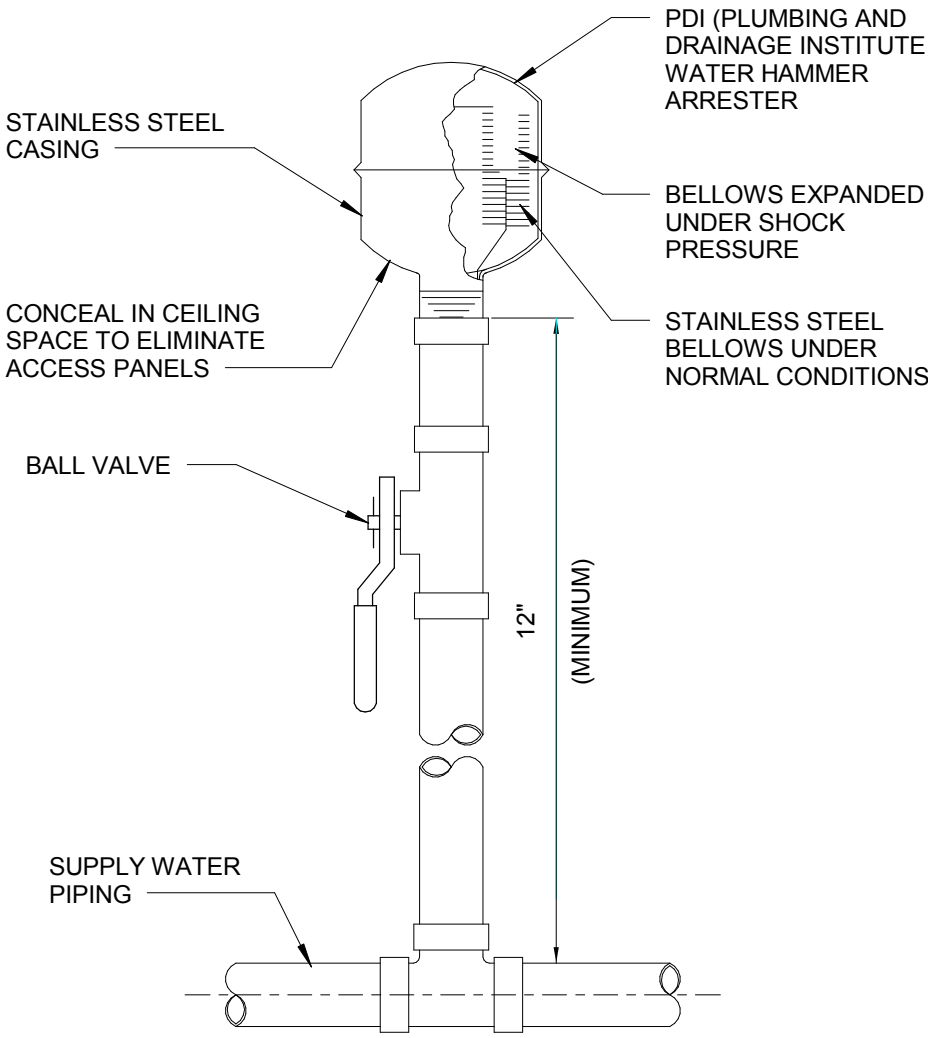
Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

A/E Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

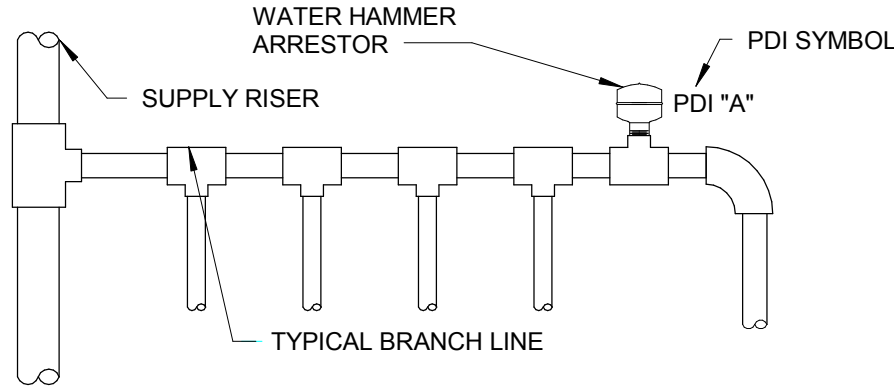


Drawn By **AR**
Checked By **AK**
Sheet Number
P201



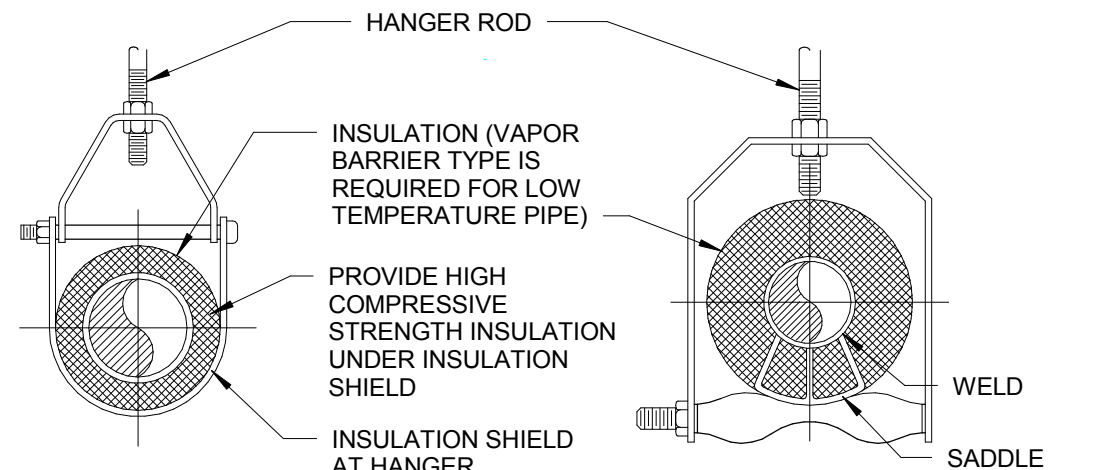


WATER HAMMER ARRESTOR SCHEDULE						
PDI SYMBOL	A	B	C	D	E	F
FIXTURE UNIT RATING	1-11	12-32	33-60	61-113	114-154	155-330



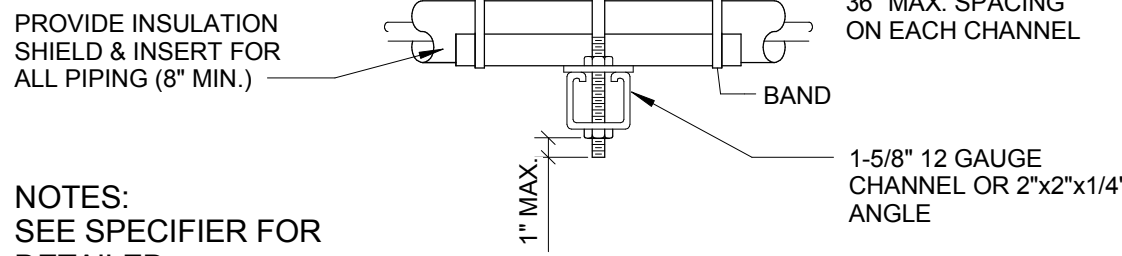
NOTES:

1. INSTALLATION OF WATER HAMMER ARRESTORS SHALL BE AT THE END OF BRANCH LINE BETWEEN THE LAST TWO FIXTURES SERVED.
2. ONE WATER HAMMER ARRESTOR PER 20' LINE, AND ANOTHER FOR BRANCHES OVER 20' IN LENGTH.
3. THE SUM OF FIXTURE UNIT RATING OF UNITS OVER 20' IN LENGTH SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF THE BRANCHES.



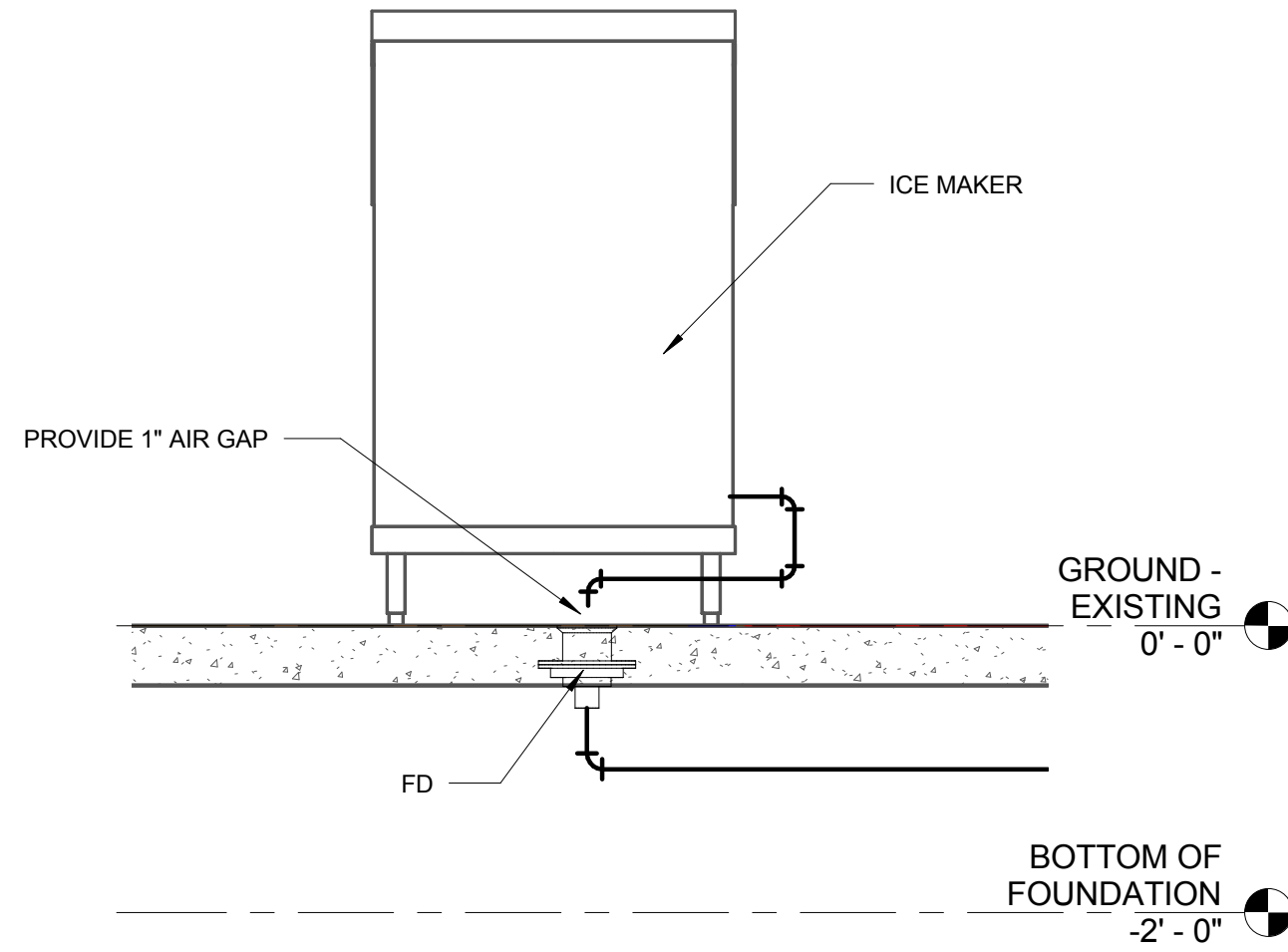
ADJUSTABLE CLEVIS HANGER
SEE SPECIFICATIONS FOR MAX
SUPPORT SPACING)

ADJUSTABLE CLEVIS HANGER
SEE SPECIFICATIONS FOR MAX
SUPPORT SPACING)



SIDE VIEW TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

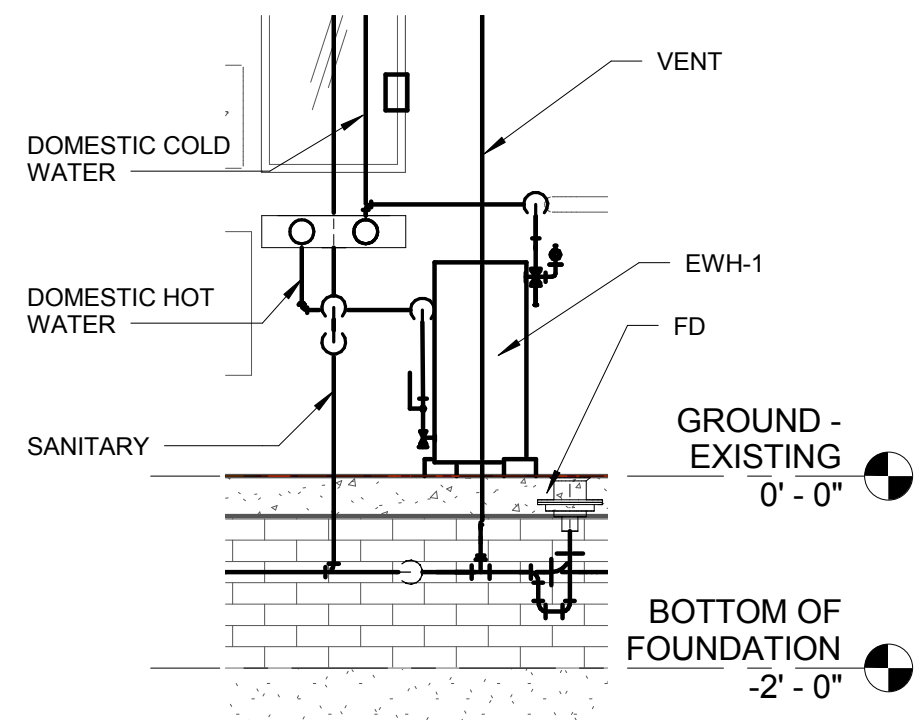
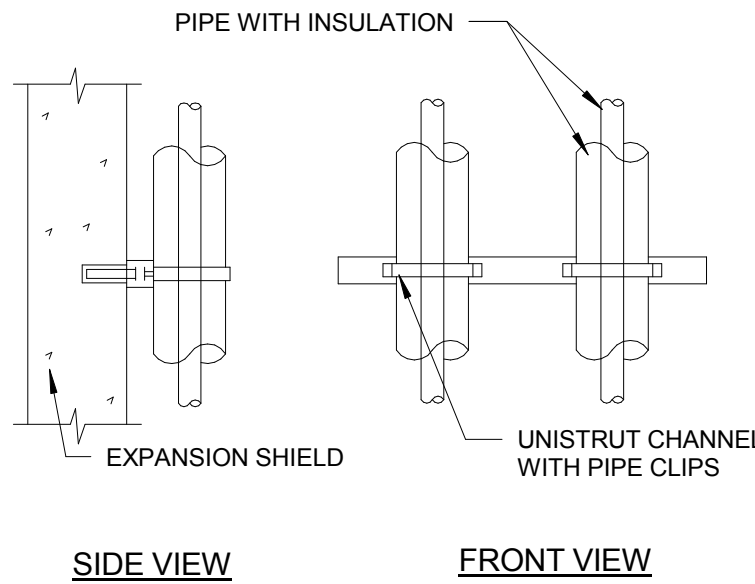
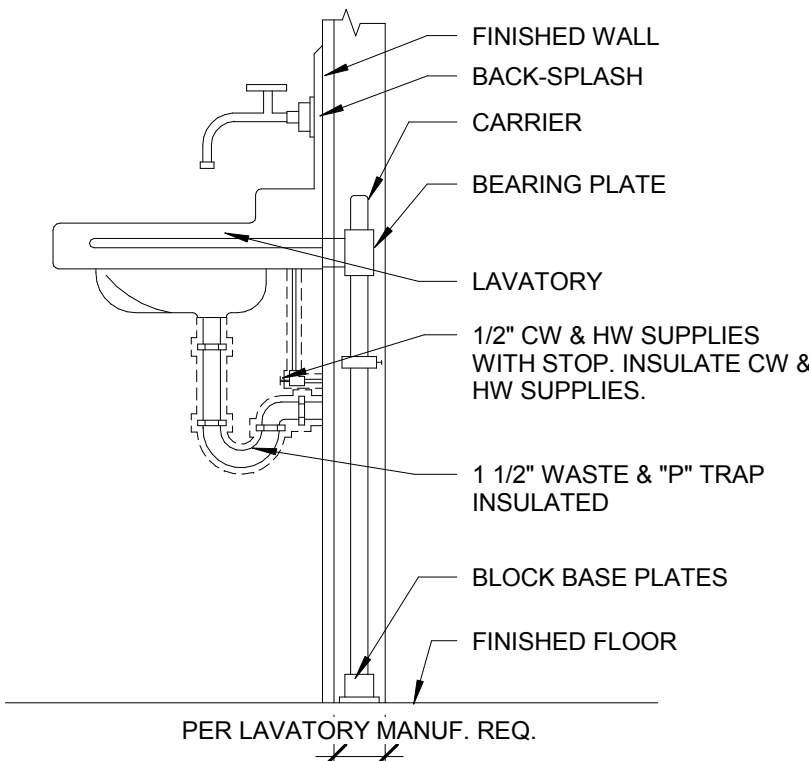
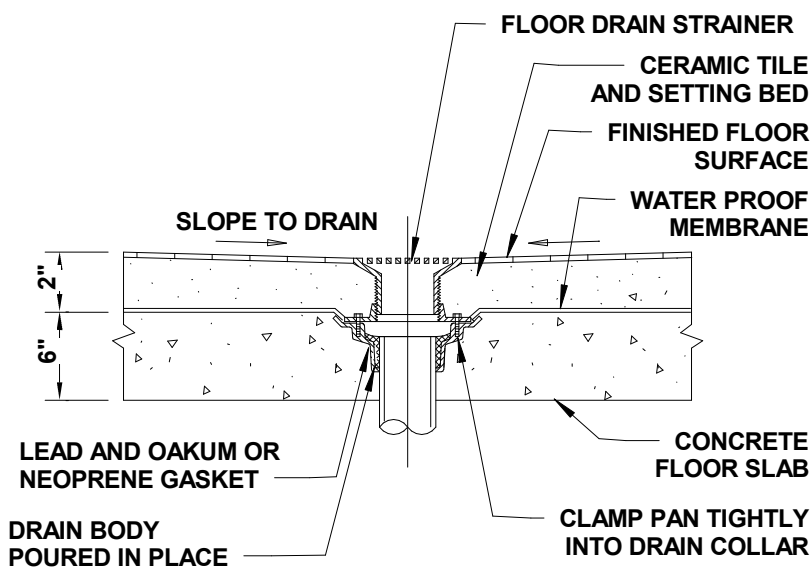
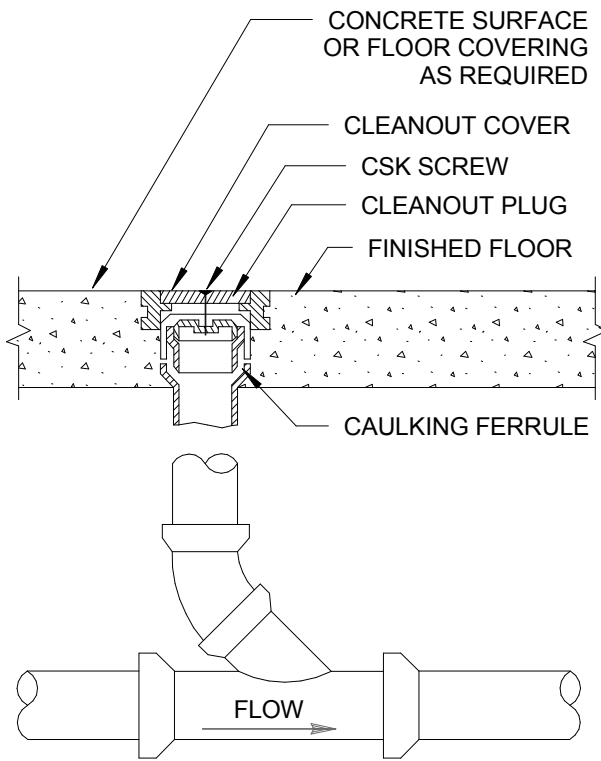
MAXIMUM PIPE/TUBING SUPPORT BRACING											
NOM. SIZE IN.	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8
PIPE FT.	7	7	7	9	10	11	12	14	16	17	19
TUBING FT.	5	6	7	8	8	9	10	12	13	14	16
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.											



1 WATER HAMMER ARRESTER DETAIL
P300 NTS

2 PIPING HANGER DETAIL
P300 NTS

10 ICE MAKER PIPING DETAIL
P300 3/4" = 1'-0"



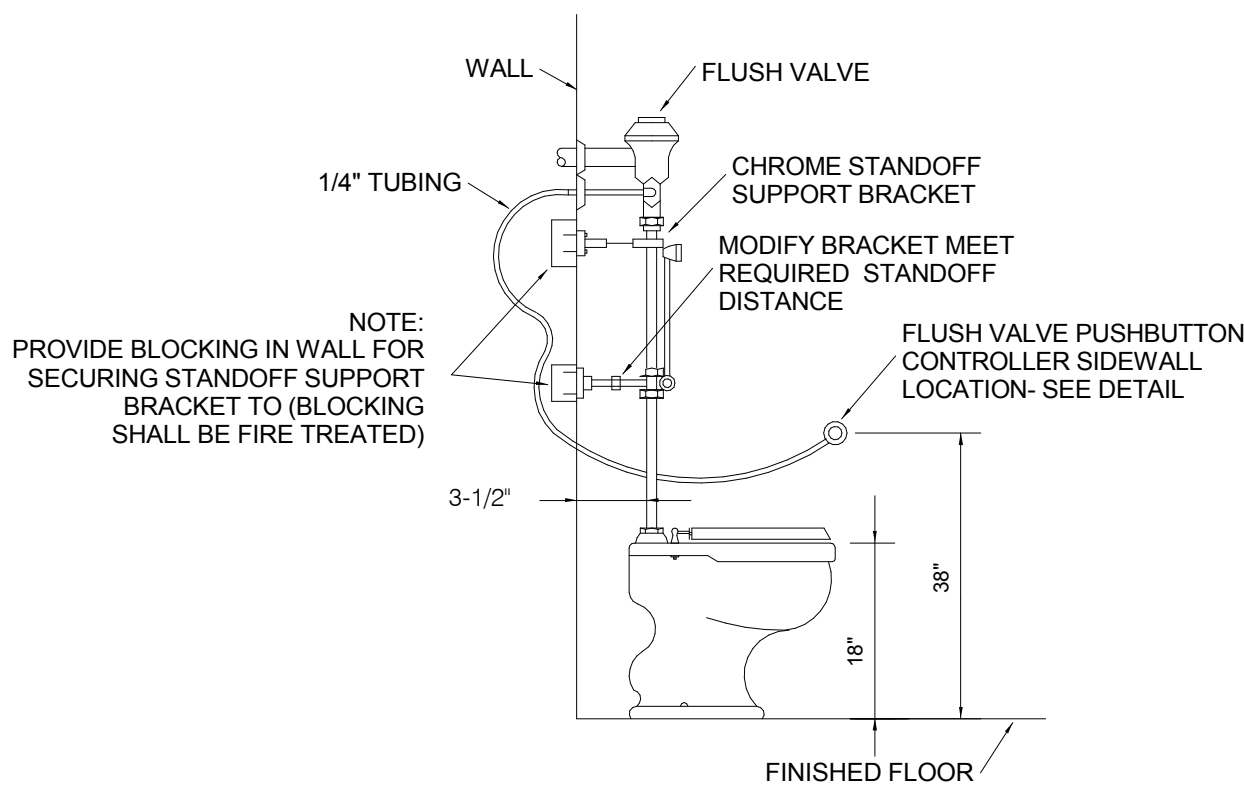
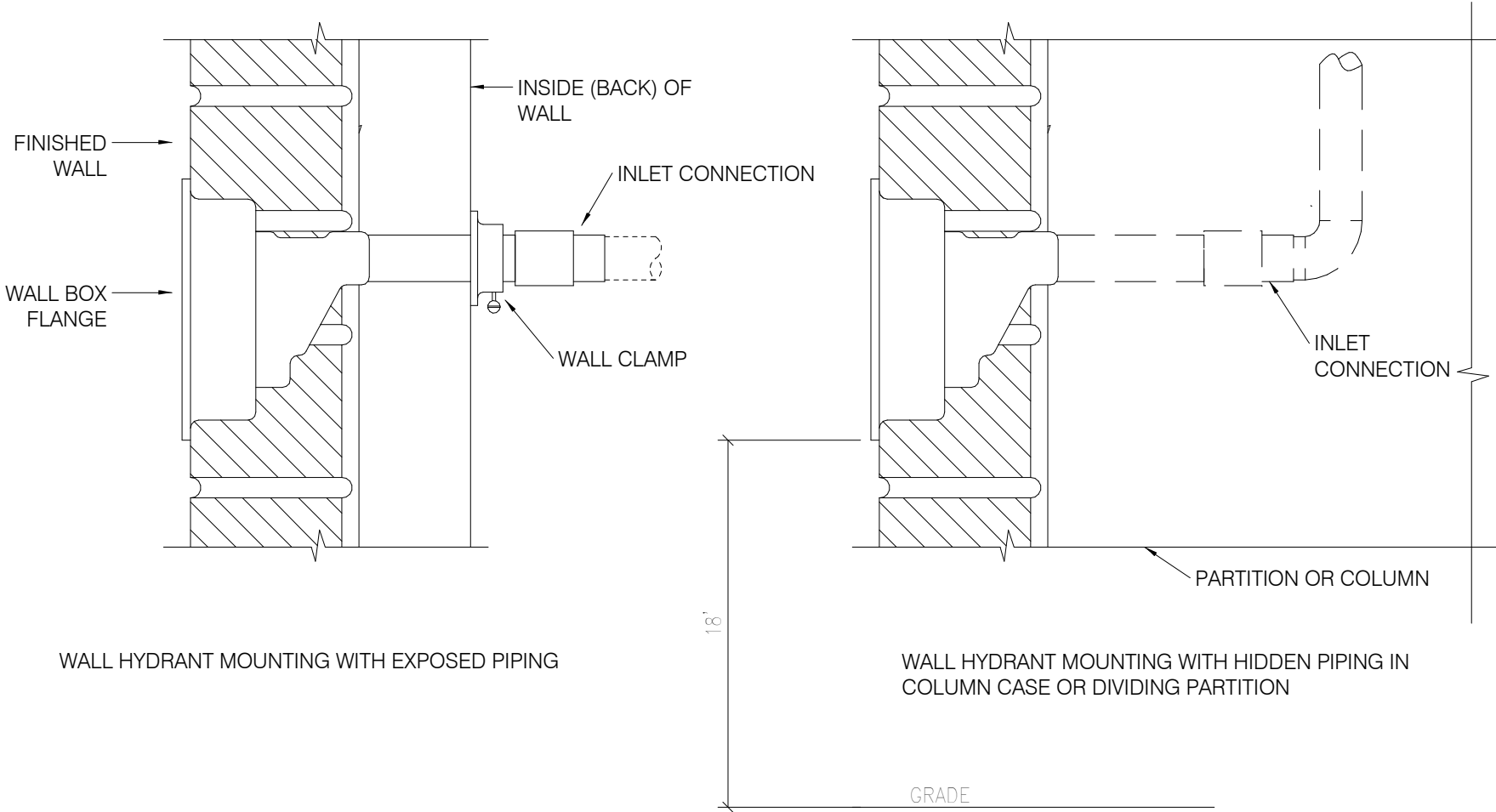
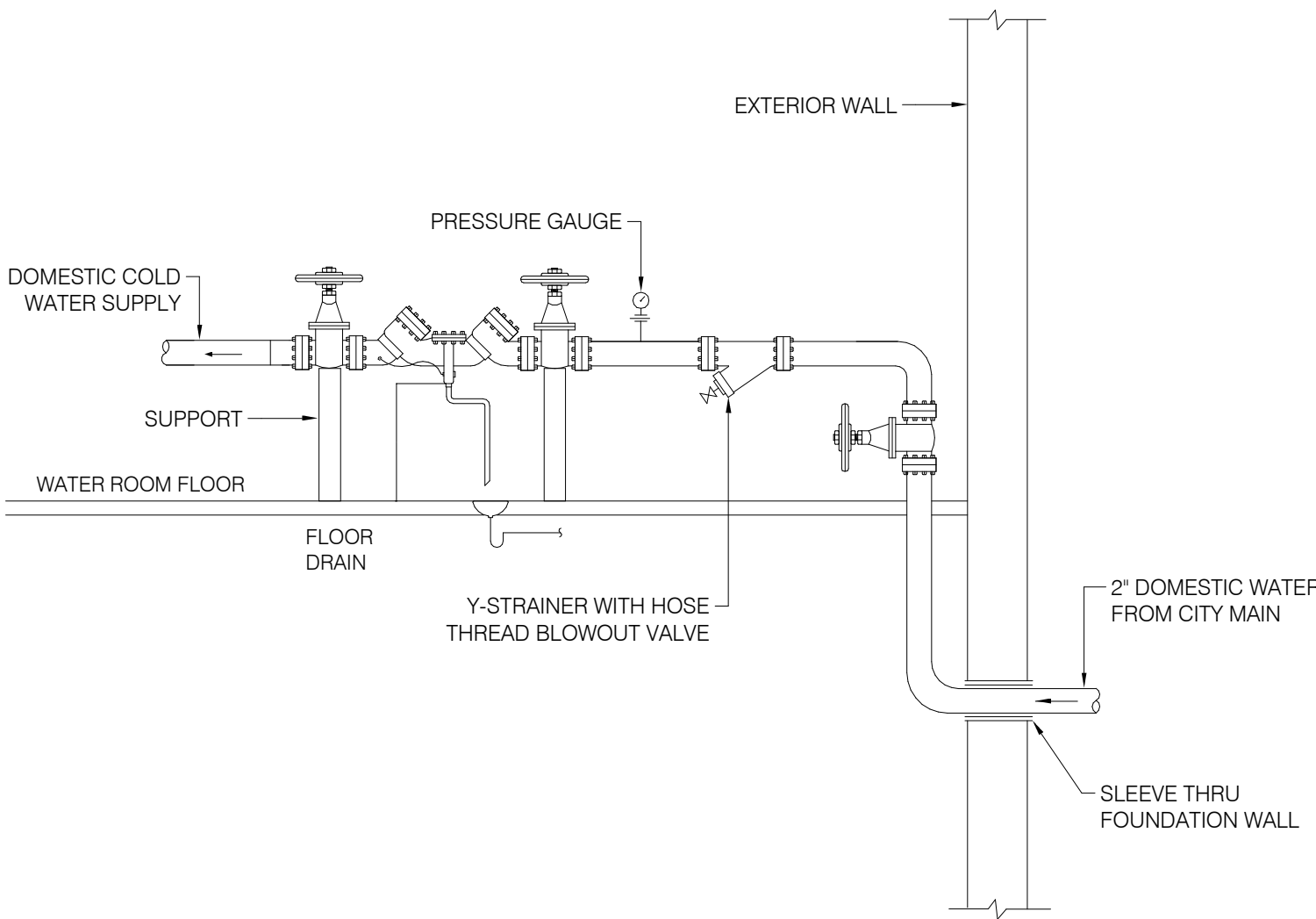
3 FLOOR CLEAN OUT DETAIL
P300 NTS

4 FLOOR DRAIN DETAIL
P300 NTS

5 TYPICAL LAVATORY CARRIER DETAIL
P300 NTS

6 WALL SUPPORT PIPING DETAIL
P300 NTS

11 BATHROOM GROUP DETAIL
P300 1/2" = 1'-0"



7 DOMESTIC WATER INCOMING SERVICE DETAIL
P300 NTS

8 FREEZEPROOF WALL HYDRANT DETAIL
P300 NTS

9 WATER CLOSET DETAIL
P300 NTS

**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

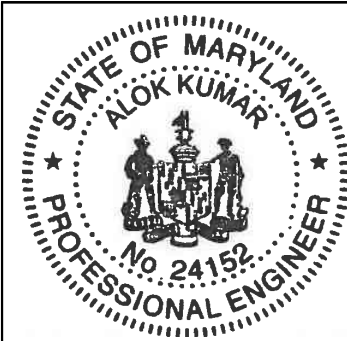
Drawing Title

PLUMBING - DETAILS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

A/E Project Number: 12-0009.012
Date: 06.30.2016
Drawing Scale: AS NOTED
CADD Filename: Revit Model
CADD Plot Scale: 1:1

Drawn By: RP
Checked By: AK
Sheet Number: **P300**



DOMESTIC HOT WATER HEATER SCHEDULE										
TAG	TYPE	SERVICE	ELECTRIC				RECOVERY RATE		TANK VOLUME (GALLONS)	BASIS OF DESIGN MANUFACTURER AND MODEL
			KW	VOLT	PH	HZ	GPM	TEMP. RISE (°F)		
EWH-1	ELECTRIC MINI TANK WATER HEATER	NEW TOILET ROOM	1.4	120	1	60	0.80	40	2.5	EEMAX MODEL EMT2.5 POINT OF USE WITH ADJUSTABLE TEMP. CONTROL 50-140 DEG F.

PLUMBING FIXTURE SCHEDULE										
EQUIP. TAG	FIXTURE	WASTE	VENT	CW	HW	BASIS OF DESIGN				
WC-1	WATER CLOSET (ADA)	4"	2"	1"	-	FLOOR MOUNTED MANUAL FLUSH VALVE WITH 1.28 GPF. ADA. ACORA MODEL #R 2115 OR EQUAL				
L-1	LAVATORY (ADA)	1 1/2"	1 1/2"	1/2"	1/2"	STAINLESS STEEL SINKS WHLV-175-S, WALL MOUNTED, WITH SINGLE FAUCET HOLE FOR FAUCET AND ELECTRONIC PROXIMITY FAUCET WITH CAST SPOUT 2.0 GPM				
FD-1	FLOOR DRAIN	2"	1 1/2"	-	-	ZURN LIGHT COMMERCIAL Z415B-P WITH STRAINER TRAP PRIMER CONNECTION				
AD-1	AREA DRAIN	6"	-	-	-	HEAVY DUTY NICKEL BRONZE JAY R SMITH MODEL 2295 W/SEDIMENT BUCKET				
HB-1	HOSE BIB	-	-	3/4"	-	WATTS SERIES FHB OR EQUAL				
EW-C-1	ELECTRIC WATER COOLER (ADA)	2"	1 1/2"	1/2"	-	OASIS MODEL BARRIER FREE, 1/5 HP, 340 W, 1 PH. MODULAR M8SBPM OR EQUAL				
CO-1	CLEANOUT - PVC					JOSAM SERIES CO-430 PVC CLEANOUT				
CO-2 CO-3	CLEANOUT - CAST IRON					JOSAM 55000 SERIES COATED CAST IRON KLEENATRON® II LEVELEZE® FLOOR CLEANOUT				

BACKFLOW PREVENTER SCHEDULE				
TAG	DESCRIPTION	SIZE	CAPACITY	BASIS OF DESIGN MANUFACTURER AND MODEL
BFP-1	BACKFLOW PREVENTER	1/2"	5 GPM @ 11 PSI	WATTS MODEL LF007 DUAL CHECK VALVE STYLE (ASSE 1024 COMPLIANT)
BFP-2	BACKFLOW PREVENTER	1 1/2"	48 GPM @ 15 PSI	REDUCED PRESSURE ZONE ASSEMBLY MODEL WATTS SERIES 009 OR EQUAL



MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

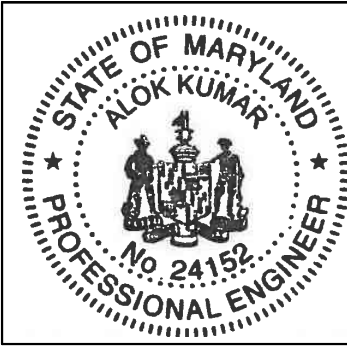
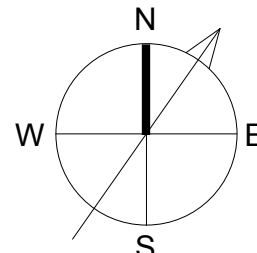
514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License number 24152, Expiration date 03.19.2017

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016
Revisions		
Drawing Title		
PLUMBING SCHEDULES		
Phase		
<input type="checkbox"/> CONCEPT <input type="checkbox"/> 30% <input type="checkbox"/> 60% <input type="checkbox"/> 90% <input checked="" type="checkbox"/> 100%		
A/E Project Number		Drawing Scale: AS NOTED
12-0009.012		
Date	CADD Filename	CADD Plot Scale
06.30.2016	Revit Model	1:1
Drawn By		AR
Checked By		AK
Sheet Number		P400



GENERAL NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE STRUCTURAL DRAWINGS AND THEIR DIMENSIONS WITH OTHER DRAWINGS AND IF A CONFLICT EXISTS, HE SHALL NOT CARRY OUT THE AFFECTED WORK UNTIL THE ARCHITECT HAS RESOLVED THE CONFLICT.
- ALL WORK SHALL CONFORM TO THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS", AND THE ACI-531 "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" LATEST EDITIONS.
- THE DESIGN LOADS ARE AS RECOMMENDED BY THE BUILDING OFFICIALS AND CODE ADMINISTRATORS NATIONAL BUILDING CODE.
- ALL PIERS AND FOOTINGS ARE CENTERED ON COLUMNS UNLESS OTHERWISE INDICATED ON PLAN.
- DO NOT SCALE FROM DRAWINGS. ALL DIMENSIONS SHALL BE READ OR COMPUTED.
- ALL OPENINGS SHOWN ON PLAN AND/OR SECTIONS SHALL BE VERIFIED WITH THE OTHER CONTRACT DOCUMENTS. OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS SHALL BE INSTALLED ONLY AFTER THE APPROVAL OF THE ENGINEER.
- CONTRACTORS SHALL VERIFY DIMENSIONS AND LOCATIONS OF ALL SLOTS, PIPE SLEEVES, HANGERS, CHASES, ANCHOR BOLTS, ETC., REQUIRED FOR MECHANICAL TRADES BEFORE CONCRETE IS POURED.

CONCRETE

- ALL CONCRETE TO HAVE 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS UNLESS OTHERWISE NOTED.
- ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN AN APPROVED AIR-ENTRAINING ADMIXTURE.
- THE LOCATION OF ALL ISOLATION, CONTROL AND CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

MASONRY UNITS

- CONCRETE MASONRY UNITS IN BEARING WALLS SHALL CONFORM TO THE APPLICABLE ASTM STANDARDS AS INDICATED IN THE PROJECT SPECIFICATIONS.
- LOAD BEARING CONCRETE MASONRY UNITS SHALL HAVE A MINIMUM 28 DAY NET COMPRESSIVE STRENGTH OF 2000 PSI WITH A MINIMUM $f_m = 1350$ PSI.
- ALL MORTAR TO BE TYPE S MORTAR.
- ALL GROUT TO BE "EMBECO" NON-SHRINK GROUT ($FC = 5,000$ PSI) OR EQUAL.
- PROVIDE DUR-O-WALL OR EQUAL JOINT REINFORCEMENT EVERY BLOCK COURSE BELOW GRADE AND EVERY OTHER BLOCK COURSE ABOVE GRADE IN ALL MASONRY WALLS UNLESS NOTED OTHERWISE.
- THE BEARING COURSE UNDER ALL CONCENTRATED LOADS SHALL BE 100% SOLID MASONRY. THE SOLID MASONRY SHALL CONSIST OF 100% SOLID UNITS OR HOLLOW BLOCK GROUTED SOLID AT LEAST (3) COURSES WIDE BY (2) COURSES DEEP UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- WHERE CHANGES IN MASONRY UNIT TYPES OCCUR, OR AT ANY INCREASE OR DECREASE IN WALL THICKNESS, THE BLOCK COURSE BELOW SHALL BE 100% SOLID.

REINFORCING STEEL

- REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60, $F_y = 60,000$ PSI.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
- WELDED WIRE FABRIC SHALL BE FURNISHED IN MATS.
- LAP EDGES OF WELDED WIRE FABRIC AT LEAST 10" IN EACH DIRECTION.
- MINIMUM CONCRETE COVER FOR CAST-IN-PLACE CONCRETE SHALL BE PROVIDED FOR REINFORCEMENT AS FOLLOWS.
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH...3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER
- #6 THROUGH #18 BARS...2"
 - #5 BAR AND SMALLER...1 1/2"
 - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
- SLABS, WALLS, JOISTS: #11 BAR AND SMALLER...3/4"
- BEAMS, COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS...1 1/2"

LINTELS

- UNLESS OTHERWISE INDICATED, PROVIDE LOOSE ANGLE LINTELS AS FOLLOWS, WITH ONE ANGLE FOR EACH 4" OF MASONRY WITH THE 3 - 1/2" LEG HORIZONTAL:
 - OPENINGS TO 3' - 0"... 3 - 1/2" X 3 - 1/2" X 1/4" ANGLE
 - OPENINGS FROM 3' - 1" TO 5' - 0"... 4" X 3 - 1/2" X 5/16" ANGLE
 - OPENINGS FROM 5' - 1" TO 6' - 0"... 5" X 3 - 1/2" X 3/8" ANGLE
- ALL ANGLES TO HAVE 8 INCH MINIMUM BEARING.
- PRECAST LINTELS FOR OPENINGS UP TO 6' - 0" SHALL BE OF SAME TEXTURE AS ADJOINING MASONRY AND SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED.
 - 4" WALLS... 4 X 8 REINFORCED WITH (1) - #4 TOP AND BOTTOM
 - 6" WALLS... 6 X 8 REINFORCED WITH (1) - #4 TOP AND BOTTOM
 - 8" WALLS... 8 X 8 REINFORCED WITH (2) - #4 TOP AND BOTTOM
 - 12" WALLS... 12 X 8 REINFORCED WITH (2) - #4 TOP AND BOTTOM
- ALL PRECAST LINTELS TO HAVE 8 INCH MINIMUM BEARING.

ATTACHMENTS, MODIFICATIONS TO STRUCTURE AND MISCELLANEOUS

- NO HOLES ARE TO BE CUT OR DRILLED IN STRUCTURAL MEMBERS IN THE FIELD UNLESS APPROVED BY THE ENGINEER AND UNLESS SPECIFICALLY DIRECTED BY NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS.
- PROVIDE STRUCTURE, SUPPORTS, BRACES, ETC. AS REQUIRED FOR THE INSTALLATION OF ALL TYPES OF EQUIPMENT. INSTALLATION TO BE AS SHOWN ON THE STRUCTURAL DRAWINGS OR IF NOT SHOWN, THEN SUBJECT TO THE APPROVAL OF THE ENGINEER. STRUCTURE SPECIALLY REQUIRED FOR SUPPORT OF EQUIPMENT SHALL BE LOCATED AND INSTALLED AS REQUIRED SUBJECT OT THE ENGINEER'S APPROVAL.

ROOF FRAMING

- LIVE LOADS: ROOF = 30 PSF
- WOOD FRAMING MEMBERS SHALL HAVE STRUCTURAL PROPERTIES (AS A MIN.) EQUIVALENT TO THOSE OF NO. 2 SOUTHERN PINE (SURFACE DRY) 19% M.C. AS DEFINED BY THE NDS 1986 WITH A $F_b = 1200$ PSI, $F_v = 90$ PSI, $E = 1.6 \times 10^6$ PSI.
- PLYWOOD ROOF SHEATHING SHALL BE 3/4 INCH THICK, WITH TONGUE AND GROOVE EDGES, AND ALSO 1/2 INCH THICK, WITH ONE PANEL EDGE CLIP BETWEEN EACH SUPPORT, AS SPECIFIED ON THE ROOF FRAMING PLAN. REFER TO THE PROJECT SPECIFICATIONS FOR MATERIAL AND FASTENING CRITERIA.
- UNLESS NOTED OTHERWISE, ALL TIMBER NAILING WILL BE DONE IN ACCORDANCE WITH APPENDIX C - BOCA BASIC BUILDING CODE, A COPY OF WHICH SHALL BE ON THE SITE AT ALL TIMES.
- ALL ROOF TRUSS AND RAFTER CONNECTIONS SHALL BE MADE WITH TECO OR SIMPSON STRONG TIE STRUCTURAL WOOD FASTENERS AS SPECIFIED ON THE STRUCTURAL DRAWINGS.
- ALL WOOD MEMBERS TO BE PROTECTED AGAINST DECAY AND INSECT INFESTATION, WHERE REQUIRED, WITH APPROVED TREATMENT AND AS CALLED FOR UNDER THE PROVISIONS OF SECTION 1712.0 BOCA 1987.
- ROOF TRUSS SHOP DRAWINGS SHALL BE FURNISHED BY THE MANUFACTURER AND SHALL INCLUDE CERTIFICATION BY A PROFESSIONAL ENGINEER REGISTERED IN MARYLAND. DESIGN AND GENERAL ARRANGEMENT ARE SUBJECT TO THE REVIEW OF THE ARCHITECT/ENGINEER.
- ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS:

TOP CHORD L.L.	= 30 PSF	BOTTOM CHORD D.L.	= 5 PSF
TOP CHORD D.L.	= 10 PSF	MISC LOAD	= 5 PSF

SNOW DRIFT LOAD OF 65 PSF AT THE EDGE OF THE MANSARD, TAPERING DOWN TO ZERO AT A DISTANCE OF 9' - 0". SNOW DRIFT LOAD IS IN ADDITION TO 30 PSF TOP CHORD LIVE LOAD (SNOW LOAD).
- DESIGN, FABRICATION AND INSTALLATION OF METAL PLATE CONNECTED TRUSSES SHALL BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NFPA) AND THE SPECIFICATION FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES (TPI).
- STAGGER ROOF TRUSSES IN LINE THE MINIMUM AMOUNT REQUIRED IN ORDER TO PROVIDE FULL TRUSS BEARING
- ANY ATTACHMENT TO TRUSSES FOR SUPPORT OF ANY MATERIAL OTHER THAN SHEATHING SHOULD BE MADE AT CHORD PANEL POINTS AND BE APPROVED BY THE ENGINEER. IF ATTACHMENT AT CHORD PANEL POINT IS NOT POSSIBLE, PROVIDE ATTACHMENT SUBJECT TO THE ENGINEER'S APPROVAL.
- EXTRA ROOF TRUSSES AND SPECIAL FRAMING HAVE BEEN INDICATED IN MOST CASES WHERE REQUIRED BY SPECIAL APPLICATIONS. LOCATIONS SHOWN ARE SCHEMATIC AND MUST BE VERIFIED BY THE TRUSS MANUFACTURER.

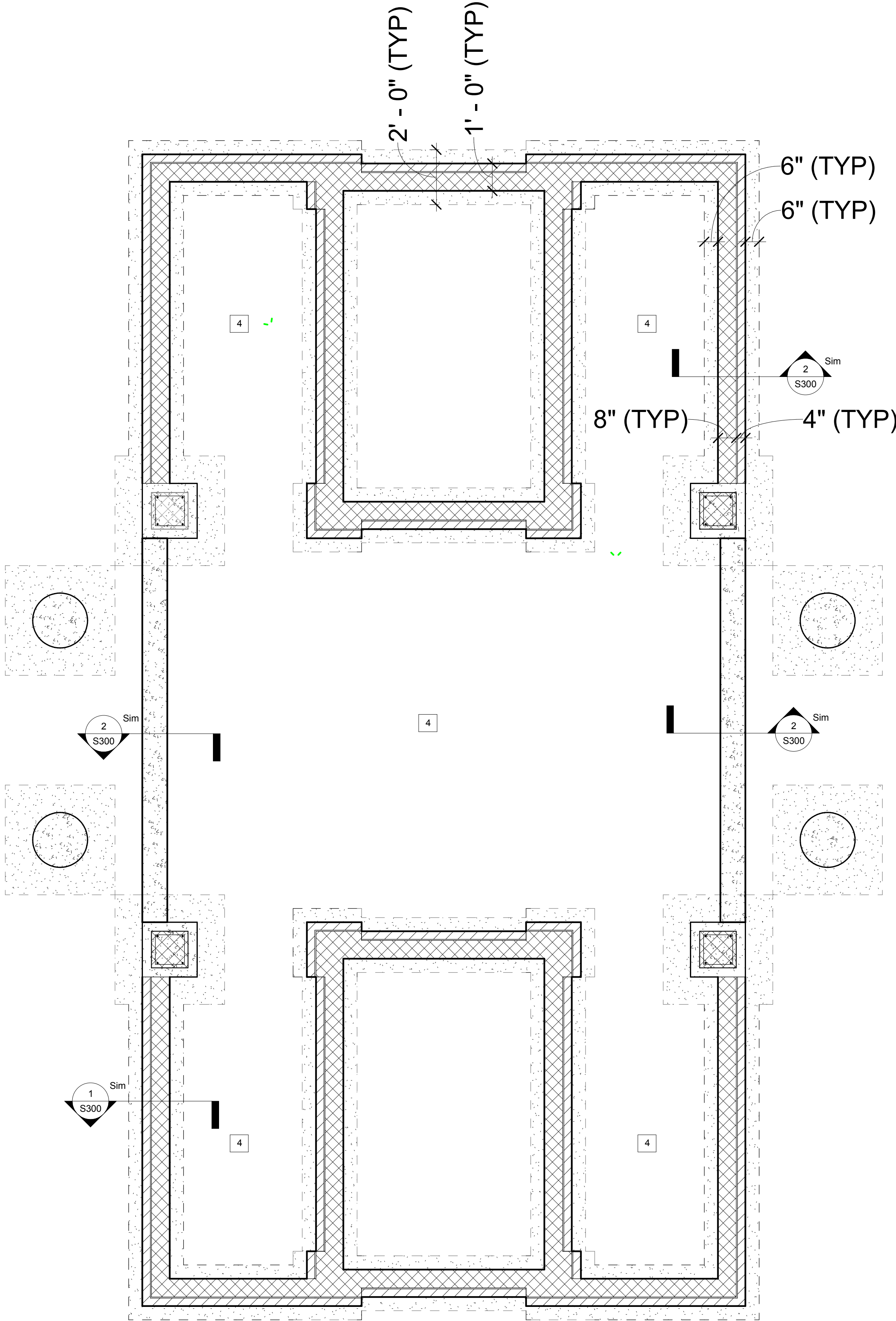
FOUNDATIONS

- SUBSURFACE INVESTIGATION AND REPORT BY:
EARTH ENGINEERING & SCIENCES, INC.
3401 CARLINS PARK DRIVE
BALTIMORE, MARYLAND 21215
(301) 466-1400
- THE FOUNDATION SYSTEM AND THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE AS SPECIFIED ON THE FOUNDATION PLAN.
- FOOTINGS SHALL NOT BE CONSTRUCTED UNTIL THE SOIL IS APPROVED AS HAVING THE ASSUMED BEARING VALUE BY THE SOILS ENGINEER OR INSPECTOR.
- THE MAXIMUM SLOPE BETWEEN BOTTOMS OF ADJACENT FOOTINGS SHALL BE (2) HORIZONTAL TO (1) VERTICAL.
- SLAB ON GRADE CONTROL JOINTS SHALL BE LOCATED AS SHOWN ON PLAN.
- WHERE BACKFILL IS REQUIRED ON BOTH SIDES OF WALLS, BACKFILL BOTH SIDES SIMULTANEOUSLY.
- WHERE MACHINERY USED FOR BACKFILL COULD DAMAGE THE WALL, THE WALL MUST BE ADEQUATELY BRACED DURING THE ENTIRE BACKFILLING OPERATION, ALTERNATELY, HEAVY EQUIPMENT USED IN BACKFILLING SHOULD NOT APPROACH CLOSER TO THE TOP OF THE WALL THAN A DISTANCE EQUAL TO THE HEIGHT OF THE WALL.
- ALL BACKFILL SHALL BE CLEAN, POROUS MATERIAL.

1
S100

FOUNDATION PLAN - PROPOSED

3/8" = 1'-0"



FOUNDATION PLAN NOTES:

- TOP OF SLAB ELEVATION 0'-0"
- ALLOWABLE SOIL BEARING PRESSURE: 2,000 PSF
- TOP OF NEW WALL FOOTING TO MATCH ADJACENT EXISTING FOOTING
- 4" CONCRETE SLAB ON GRADE REIN. W/ 6X6 - W1.4 X W1.4 WWF. PLACED 2" BELOW SURFACE ON VAPOR BARRIER ON COMPACTED EARTH TYP.
- THE SPACING OF SAW-CUT JOINT FOR SLAB ON GRADE SHALL BE LESS THAN 14'-0"



Gaithersburg
A CHARACTER COUNTS! CITY

MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA

451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.

I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15975, expiration date 10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

STRUCTURAL - FLOOR PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number
12-0009.012

Date
06.30.2016

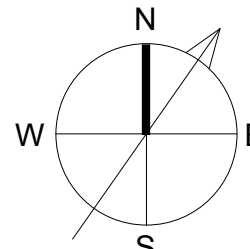
Drawing Scale: AS NOTED
CADD Filename
Revit Model
1:1

Drawn By
ASM

Checked By
AV

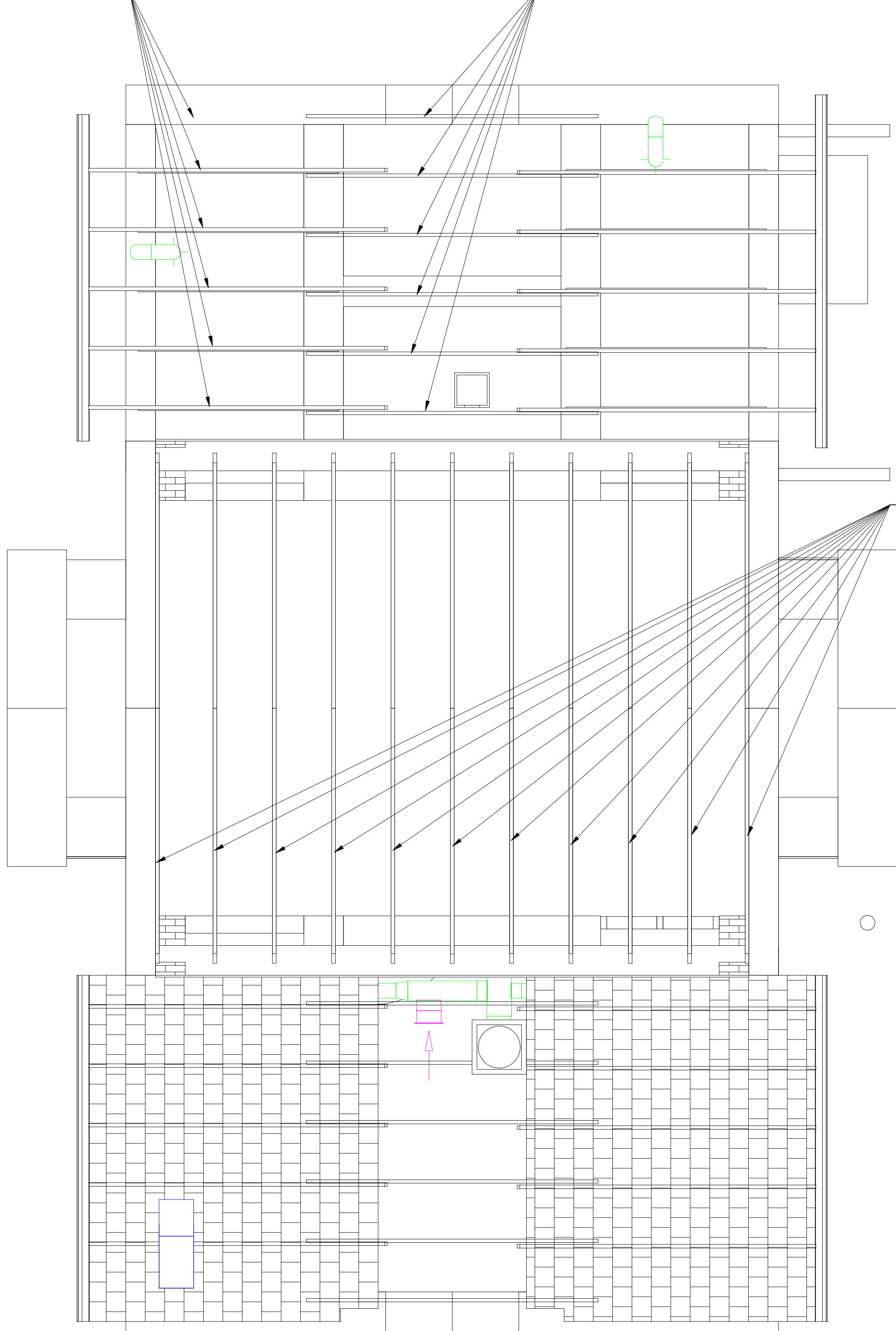
Sheet Number

S100



NEW ROOF TRUSSES TO MATCH EXISTING TRUSSES @ 24" O.C.

EXISTING ROOF TRUSSES @ 24" O.C.



EXISTING ROOF TRUSSES "G" @ 24" O.C.

ROOF FRAMING PLAN NOTES:

- 1: STRUCTURAL DESIGN OF ROOF TRUSSES SHALL BE BY TRUSS MANUFACTURER
- 2: SEE ARCH. DRAWINGS FOR TRUSS GEOMETRY OVERHANGS AND SLOPE INFO.
- 3: COORDINATE TRUSS WEBBING AND BRACING WITH M.E.P.



**MINIATURE GOLF
PARK OFFICE
BUILDING
RENOVATION**

514 S Frederick Ave,
Gaithersburg, MD 20877



NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.
I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

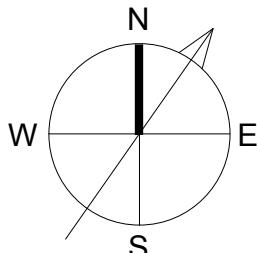
STRUCTURAL ROOF PLAN

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 90% ☒ 100%

AE Project Number 12-0009.012	Drawing Scale: AS NOTED
Date 06.30.2016	CADD Filename Revit Model
	CADD Plot Scale 1:1

Drawn By ASM	Checked By AV
Sheet Number S101	

1 TOP OF UPPER ROOF
S101 | A200 3/8" = 1'-0"





Gaithersburg
A CHARACTER COUNTS! CITY

MINIATURE GOLF PARK OFFICE BUILDING RENOVATION

514 S Frederick Ave,
Gaithersburg, MD 20877

NIKA

NIKA
451 HUNGERFORD DRIVE (P)301.770.3520
4TH FLOOR (F)301.770.3521
ROCKVILLE, MD 20850 www.nikasolutions.com

Professional Certification.

I certify that these documents
were prepared or approved by
me, and that I am a duly licensed
architect under the laws of the
State of Maryland, license
number 15975, expiration date
10.16.2015

No.	Description	Date
1	REVISION # 1	06/30/2016
2	REVISION # 2	07/12/2016

Revisions

Drawing Title

STRUCTURAL - SECTION DETAILS

Phase
☐ CONCEPT ☐ 30% ☐ 60% ☐ 80% ☒ 100%

AE Project Number
12-0009.012

Date
06.30.2016

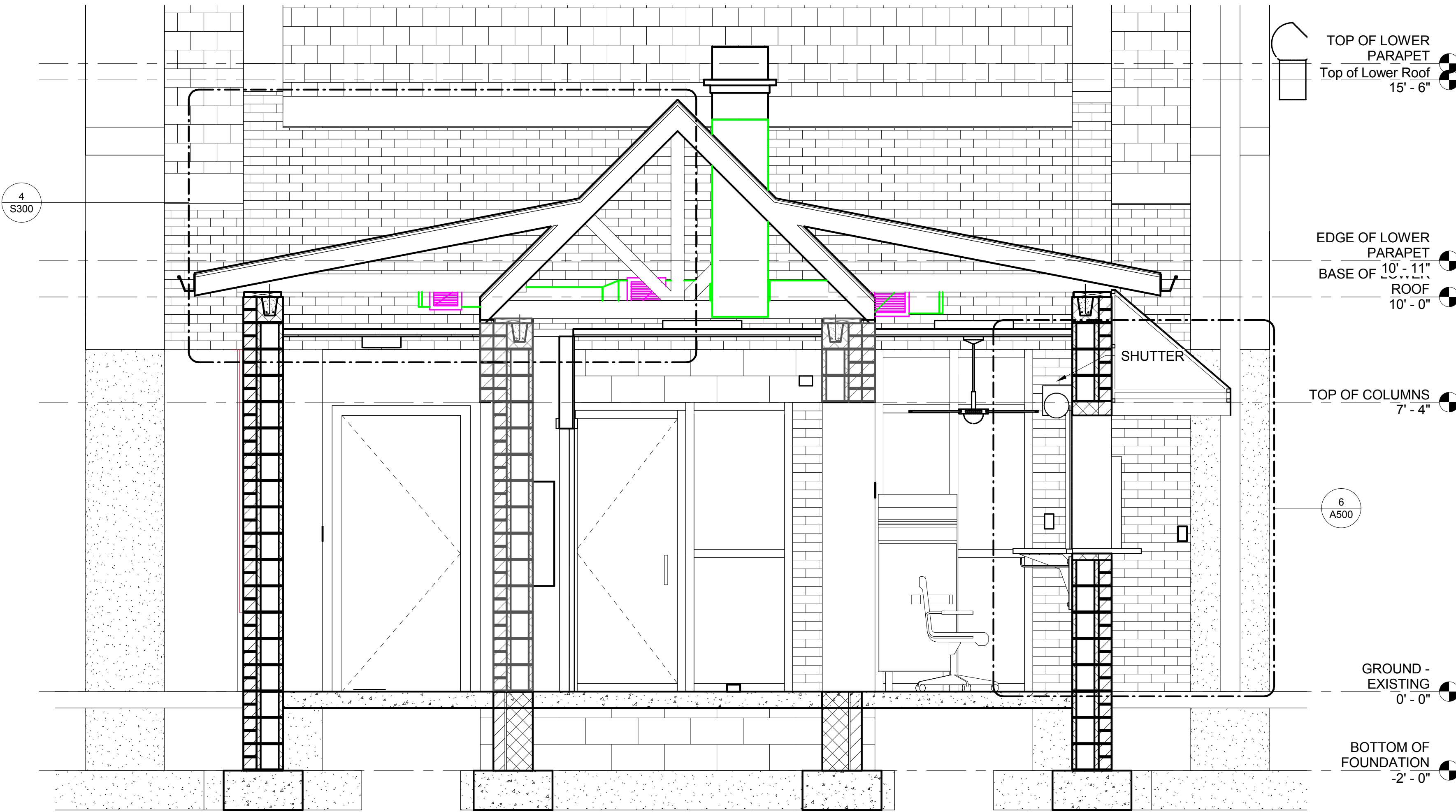
Drawing Scale: AS NOTED
CADD Filename
Revit Model 1:1

Drawn By
ASM

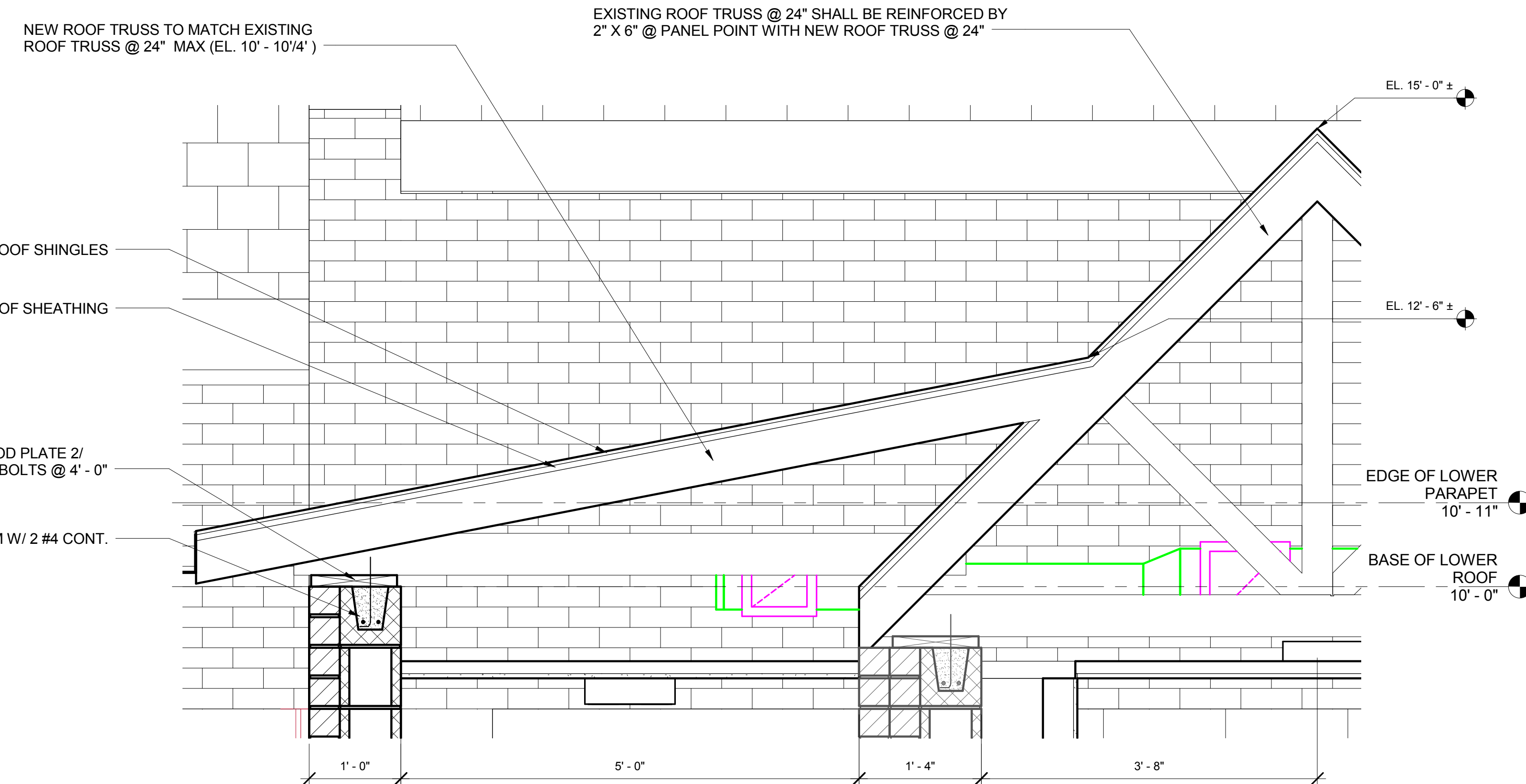
Checked By
AV

Sheet Number
S300

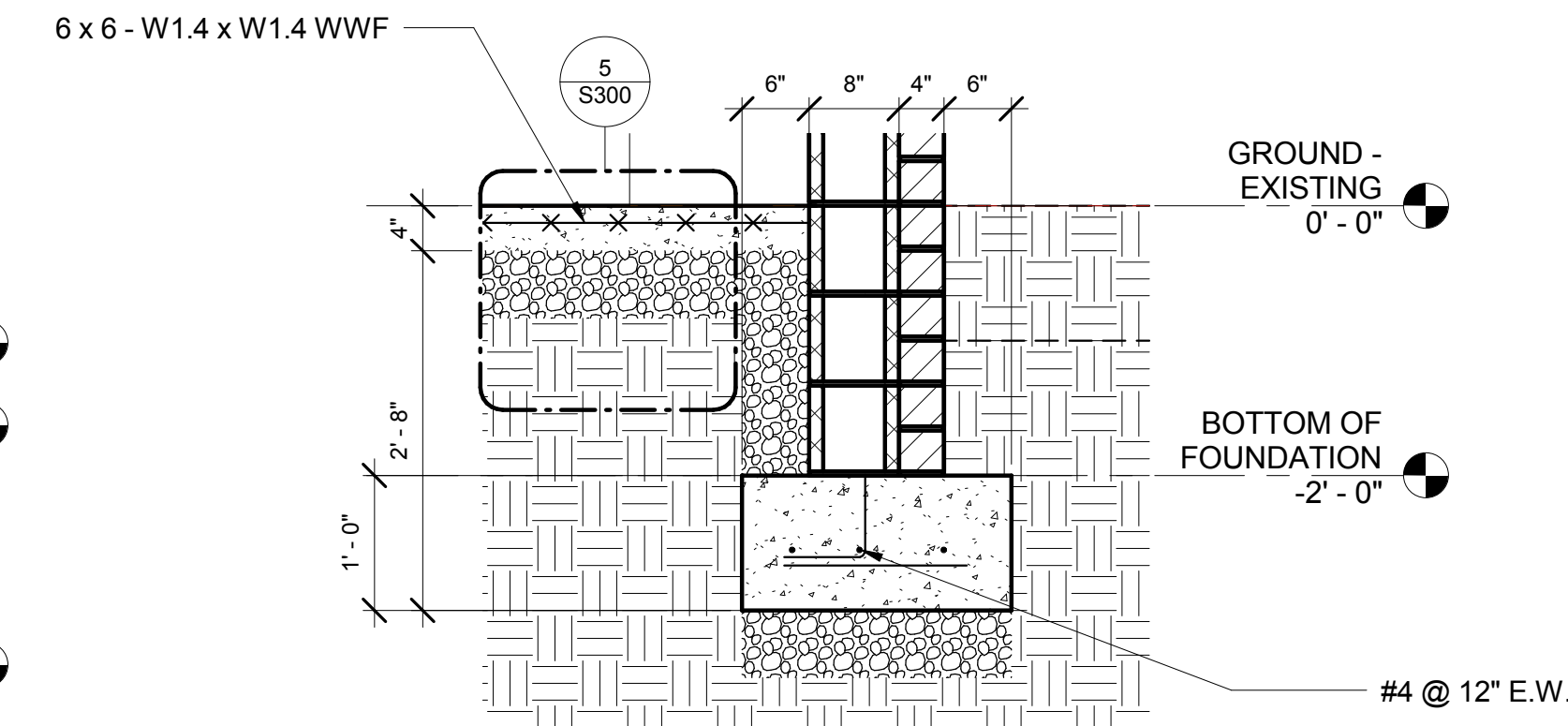
ARCHITECT
TAE Y. JUNG
License #15975
STATE OF MARYLAND



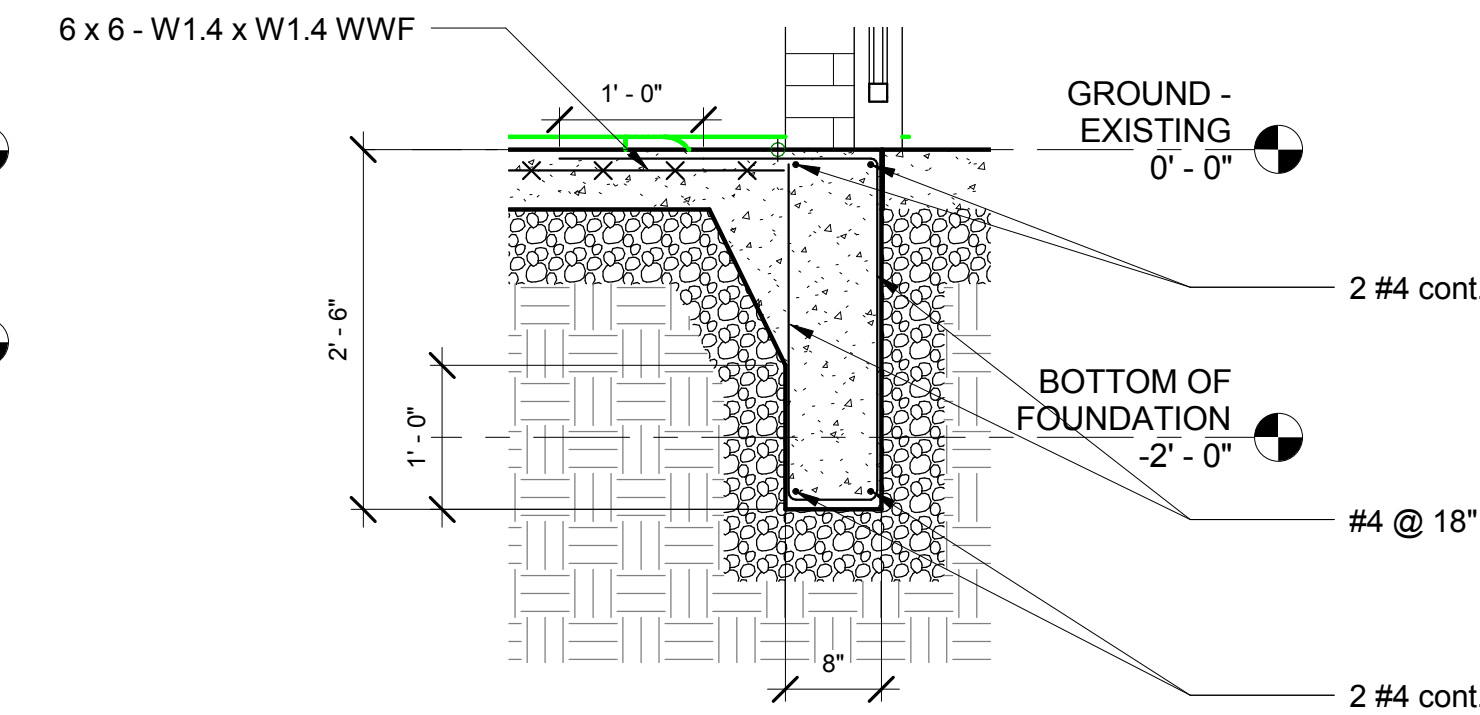
3 SHORT SECTION THROUGH OFFICE
S300 A103 1/2" = 1'-0"



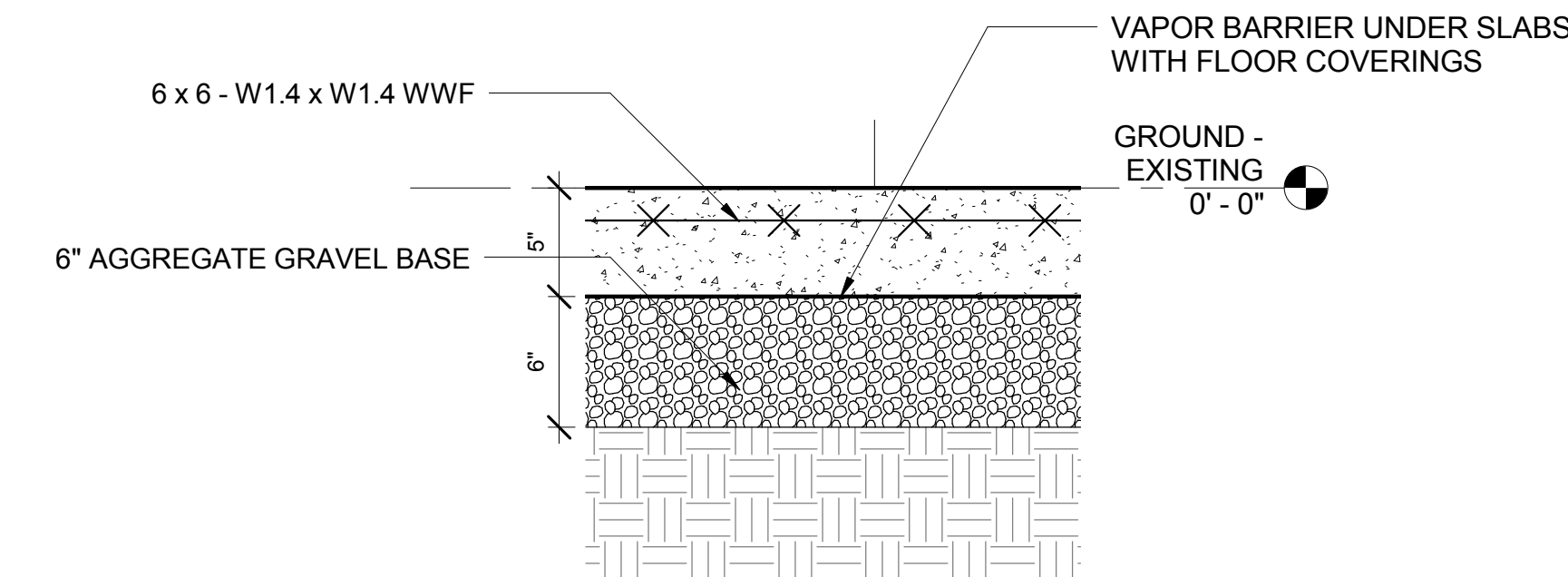
4 CALLOUT OF NEW ROOF TRUSSES OVER OFFICES
S300 1" = 1'-0"



1 NEW FOUNDATION WALL STRUCTURAL SECTION
S300 3/4" = 1'-0"



2 TURNDOWN STRUCTURAL SLAB DETAIL
S300 3/4" = 1'-0"



5 TYPICAL 5" CONCRETE SLAB DETAIL
S300 1 1/2" = 1'-0"